

**THE TEACHING
OF ELEMENTARY
SCHOOL GYMNASTICS**

BOWEN

Edgar F. Lyriat

RO. (E)



22101452922

Med
K8735

The Teaching of Elementary School Gymnastics

W. P. BOWEN

Professor of Physical Education, Michigan State
Normal College, Ypsilanti, Michigan

PUBLISHED BY
THE F. A. BASSETTE COMPANY
Springfield, Massachusetts

Copyright, 1909,
by
THE F. A. BASSETTE CO.



WELLCOME INSTITUTE LIBRARY	
Coll.	welMOMec
Call	
No.	QT

TABLE OF CONTENTS

PREFACE

CHAPTER I	The Necessity of Physical Education	9
CHAPTER II	Means of Bodily Improvement	15
CHAPTER III	Teaching	23
CHAPTER IV	The Simple Gymnastic Positions	29
CHAPTER V	Miscellaneous Exercises and Tactics	43
CHAPTER VI	Progression in Swedish Gymnastics—Theory	55
CHAPTER VII	Progression in Swedish Gymnastics—Practice	62
CHAPTER VIII	Lessons in Swedish Gymnastics	70
CHAPTER IX	German Gymnastics	75
CHAPTER X	Dumb Bells	78
CHAPTER XI	Wands	88
CHAPTER XII	Hoops	94
CHAPTER XIII	Fancy Steps	99
CHAPTER XIV	Indian Clubs	104
CHAPTER XV	Courses in School Gymnastics	115
USEFUL BOOKS ON GYMNASTICS	119

LIST OF ILLUSTRATIONS

FIGURE	NAME	PAGE
1	Fundamental Standing Position	29
2	Faulty Standing Position	30
3	Fundamental Sitting Position	30
4	Hips Firm and Fallout Forward	31
5	Fallout Sideward	31
6	Fallout Outward	31
7	Leaning Position	32
8	Hanging Position	33
9	Leaning Hang	33
10	Incline Backward from Stride	34
11	Incline Backward from Sitting	34
12	Bending Head Backward	34
13	Bending Trunk Backward	35
14	Inclining Forward from Stride	36
15	Bending Downward from Stride	36
16	Bending Trunk Sideward	36
17	Twisting Trunk	36
18	Hips Firm	37
19	Neck Firm and Stride Sideward	37
20	Bending Arms	38
21	Arms Forward	39
22	Arms Sideward	39
23	Arms Upward	39
24	Stride Forward and Bend Arms	40
25	Hips Firm and Heels Raise	40
26	Hips Firm and Knees Bend	41
27	Leg Raising	41
28	Knee Raising	41
29	Half Kneeling	45
30	Kneeling	45
31	Alignment Forward	47
32	Alignment Sideward	48
33	Opening and Closing Ranks	49
34	Opening and Closing Spaces	49
35	Marking Time	50
36	Bending Head Backward, Sitting	58
37	Walking the Beam	59
38	Arrangement for Supports	64
39	Support	65

FIGURE	NAME	PAGE
40	Leaning, Hands on Floor	68
41	Bells on Hips	78
42	Bells on Shoulders	78
43	Bells on Chest	79
44	Bells Right Horizontal	79
45	Striking Bells in front of Thighs	79
46	Anvil Stroke on Left Shoulder	80
47	Thrust Bell Sideward	80
48	Reverse Fallout	81
49	Clicking Bells	85
50	Bell Behind Waist and Step Position Crosswise Backward	85
51	Chopping with Bells	86
52	Wand in Position	88
53	Wand Forward	88
54	Wand Upward	89
55	Wand to Right Horizontal	89
56	Wand to Right Vertical	89
57	Wand Aim Forward Left	90
58	Wand on Chest	90
59	Wand on Shoulders, Trunk Bend Sideward	90
60	Arms Crossed, Fallout Sideward	90
61		
62	Hoop in Position	94
63	Divide the Hoop	94
64	Frame	95
65	Hoop Horizontal Over Head	95
66	Thrust Hoop Downward Horizontal	96
67	Hoop on Right Shoulder	96
68	Archer and Lunge to Right	96
69	Hoop Sideward Downward	96
70	Hoop Sideward Horizontal	97
71	Hoop Sideward Upward	97
72	Hoop on Head	97
73	Trunk Forward, Hoop at Frame	97
74	Half Kneeling, Hoop in Position	98
75	Walk Position	100
76	Knee Flexion	100
77	Position of Clubs	106
78	The Plain Swing	106
79	The Shoulder Circle	108
80	Parallel Shoulder Circles	108
81	The Mill Wheel	110
82	The Lower Back Circle	112

PREFACE

THE teaching of school gymnastics requires first of all a thorough knowledge of the nature of the child, mental, physical, and moral, as given in the best courses in modern pedagogical psychology; then a knowledge of the general principles of teaching, based upon the facts of child nature; a thorough gymnastic training; and finally a brief but important special training in the technique of teaching this particular subject.

Although the necessity for such a course as this for Normal Schools is not generally recognized as yet, it is really more necessary than in preparing to teach most other school subjects, because the practice of gymnastics lacks an element of preparation for teaching that other class work gives. A member of a class in gymnastics, having his attention constantly directed to his own bodily movements, is less likely to get a clear idea of the methods and purposes of the teacher in charge than in any other class, unless it is in music or manual training. In reading, mathematics, and all other common branches, the pupil spends only a small fraction of the class period in actual work in the subject; the rest of the time is used in watching the work of the others and assisting the teacher in detecting the mistakes in word or thought made by other pupils. Not so in gymnastics. Each pupil executes the commands or does his part of the drill, and if he does this well no more is expected of him.

Another reason for special training in this line is the greater expertness required of the teacher of gymnastics. The teacher of reading and mathematics observes and criticises the work of one pupil at a time; the teacher of gymnastics must observe, detect mistakes, and make efficient criticism of the whole class at once. It is one thing to be able to perform all of the gymnastic exercises correctly, but an entirely different thing to be able to present the exercises so clearly as to be understood, and then to command, observe, and criticise the work so as to secure rapid advancement, enthusiastic interest, and good order. The present course aims to train teachers to do these things efficiently and intelligently.

It is not the province of such a course as this to repeat the work of the admirable books on psychology and general method of teaching, but rather to supplement such helps by a course of theory and

practice in commanding, demonstrating, and criticising gymnastic exercises, along with a brief study of the general principles of the leading systems and a review of the most important exercises for school use.

It is very important that the teacher of physical training shall be fully aware of the necessity of the work and enthusiastic in it at all times; for that reason a brief statement of the reasons for physical education is given at the outset.

The writer feels satisfied as the result of years of experiment and observation of gymnastic work that of all the exercises devised for improvement of posture the Swedish stand easily at the head, and for that reason they are used here. They form an easy point of attack for the study of methods of teaching, because the exercises are few and perfectly definite. It does not seem best to discard the whole system because we do not agree with its authors as to the angle of the feet or similar slight details. The writer has felt free to change an exercise or a method occasionally when experience or the results of recent scientific investigation indicate the wisdom of the change. The name "Swedish Gymnastics" is used to give credit where it is due, and not to claim for this course an accurate copy of any traditional or ironclad system. The same should be said of the references freely made to the German System. That system should have full credit for many things included here, but no attempt is made to give an authoritative exposition of the system.

Nearly all the State Normal Schools in the country give practical gymnasium work sufficient to prepare their students for professional courses like this one, but few or none of them give professional courses, and as a consequence only an occasional student ever gets the teacher's point of view clearly enough to be a good teacher of school gymnastics. In the interest of the bodily welfare of the children of the public schools, all these Normal Schools, having the equipment and the special teachers, should prepare their students for actual teaching in this branch as well as in other branches of education. This course has been worked out with the hope that it will be a practical guide to those Principals and Special Teachers of Physical Education who realize the need of the professional point of view to make the teaching of physical training in Normal Schools bear more fruit in the public schools. The course should be covered by the average normal student who has had the gymnastic and pedagogic training that naturally precedes in five or six weeks.

W. P. BOWEN.

Ypsilanti, Mich., March 20, 1909.

CHAPTER I

THE NECESSITY FOR PHYSICAL EDUCATION

TERMS DEFINED.—Physical training means the exercise and training of the motor powers of the body, carried on primarily for the sake of health, discipline, or pleasure. The term implies something systematic and regular, done intelligently according to hygienic principles. Physical education has a slightly wider meaning, including all of physical training and also the knowledge of the principles that should guide such training. Physical training gives the hygienic results and the development that is desired at the time; physical education does this and also prepares the individual to carry on his own physical training and that of other people.

The best way to discover the most favorable conditions for any living organism is to notice under what conditions organisms of the same kind have thrived. In the case of man, we can do no better than to study the conditions and activities under which races of men have advanced and prospered, if we wish to know under what conditions they will continue to thrive. In other words, we must study the life habits of our ancestors in order to find out what conditions are most favorable for us and for our race in the future.

When we make inquiry into the occupations and life habits of our ancestors, we find that they have lived under conditions of civilization but a comparatively short time. There were civilized races living on the banks of the Nile and the Tigris a long time ago, but thirty centuries after that the historians of Greece and Rome wrote of our ancestors, who were still savages, living in caves and huts in the then unbroken forests of Europe and western Asia. Their food was the fish and the wild game that they could kill with the crudest of weapons; between different races and tribes there was perpetual warfare. How long this and still more primitive forms of life had existed, no one can tell. The time since man first appeared on the globe must be estimated in tens of thousands and perhaps in hundreds of thousands of years.

During all these ages our ancestors lived a life of the most strenuous physical exertion. As far back as savage life in the temperate zone can be traced, the men hunted, fished, carried on war, and took part in religious ceremonies; the women made the clothing and the shelter, prepared the food, and made all the utensils needed

in their work, besides caring for the children and the domestic animals. These two types of bodily exercise are quite different; that of the men was severe to the highest degree for a time, with periods of complete rest between; a type of exercise we now call *athletic*. That of the women was less severe but more steady and continuous; of the type of *manual labor*. As a result of these occupations both men and women were strong and vigorous; they lived and thrived in spite of unsanitary conditions and exposure to all kinds of weather and hardship. These two types of bodily exercise, carried on so vigorously for so many successive generations, no doubt did much to develop the two types of bodily form and proportions that men and women now inherit.

If we continue to study the occupations of our ancestors down to a later day, we find that they changed their habits of life a little from time to time, but until very lately they still led lives of great bodily activity. The pioneers of the early colonies along the Atlantic coast, and even those who settled our own state in the early part of the last century, were people of strong physique, many of them not a whit inferior in strength and endurance to the savages who lived here before them. One hundred years ago fully 95% of the population of the United States lived in the country, and the same was true of the middle west fifty years ago. Men cleared the forest with the axe, sowed and planted by hand, cut their grain with sickles, and threshed it with flails. Women did all the household work, including all of the dairy and laundry work, made all the clothing, and not far back they also made the cloth from which the clothing was made. Pioneer life called for muscular work and developed a sturdy race of people.

Since those days, almost within the memory of persons now living, a change has taken place in the occupations and habits of our people more sweeping and revolutionary as regards the development of bodily vigor than anything that ever happened before in the history of the race. The great feature of this change is the introduction of machinery to do the work that has always been done by muscle. Man invented the steam engine, the turbine wheel, and the gas engine to serve as means of tapping the reservoirs of energy in nature; and then the human body, that had done the work and borne the burdens of the world since time began, awoke one morning to find its occupation gone. Henceforth intelligence is not only to be supreme, as it has been in a growing measure for centuries, but it is to stand alone,—its former minister, muscular strength, reduced to the insignificant service of turning a switch to stop or start machinery.

The extent of this change in the industrial world is entirely beyond comprehension. The amount of power now being derived from steam, gas, and water in the United States, and used to do our work, is measured in millions of horse power. If we were deprived of its services, there are not enough adult male inhabitants on the earth to-day, if we could put them all at work in this country, to do what machinery is doing for us. By means of dynamos, copper wires, transformers, and motors, power is being transmitted everywhere. Labor saving machinery operated by this power, does a large and constantly increasing share in every field of industry. As a slight suggestion of its range we may mention the cotton gin, the spinning frame, the power loom, and the sewing machine in the making of clothing; the steamboat, the locomotive, the trolley car, the motor bicycle, and the automobile in transportation; the gang saw, the pile driver, the steam shovel, and the traveling crane in building; the magazine rifle, the machine gun, the submarine boat, and the battle ship in war. In the fields not yet fully covered, the introduction of labor saving devices is as rapid as ever; patents on labor saving inventions are being issued in the United States at the rate of 36,000 per year.

The introduction of machinery led to the specialization of occupations. In former times work was varied, giving to each individual not only a considerable amount of bodily exercise but at the same time distributing it to all parts of the body. Now all work runs in narrow lines. This is illustrated in factories, where each operator is given some small part to do, and he is expected to do this as rapidly and as accurately as possible day after day. In the transportation systems in the large cities the same thing is seen. One man tends to the stoking machines that supply coal to a line of furnaces; another oils the engines and sees that they run smoothly; as you enter the station one man sells you a ticket; another tells you what car to take; another watches you put your ticket in the box; another tells you when to get off; another turns the switch to stop and start the car. None of these require much more muscular force than teaching or preaching, and the work is specialized to even a higher degree than in the professions. Even in occupations where muscular work is demanded, the range of exercise is usually so small as to lead to deformity rather than to healthy development.

We still have a few occupations, like farming for men and house work for women, that afford a variety of good bodily exercise, but these occupations are shunned by the more intelligent classes, in spite of the fact that they pay well and are much less strenuous than they used to be. People flock to the occupations calling for

shorter hours, less muscular exertion, and better clothing, leaving the work that is more healthful and invigorating to newly arrived foreign immigrants. The professions of law, medicine, engineering, and teaching are crowded, and thousands go into commercial lines as stenographers, clerks, bookkeepers, traveling salesmen, agents, promoters, and managers, where intense competition and slight bodily activity is the rule.

The modern industrial system has not only reduced the amount of muscular work to be done, giving shorter hours for labor and hence more leisure, but it has at the same time greatly increased production, giving all classes of workers more money to spend in pleasure than in former times. In the choice of amusements the American people show the same inclination to avoid muscular exercise that they show in their work. They spend millions of dollars yearly on books, magazines, newspapers, and lectures; millions on festivals, concerts, parties, receptions, and banquets; millions for exhibitions on the stage and on the ball field; millions for horses, carriages, autos, pleasure boats, and for rides on boats and trains; millions for decoration in dress, in the home, and in public buildings and grounds. Interest in active exercises and games centers in seeing others play them rather than in taking an active part in them.

Now the deliberate choice, under the circumstances, of amusements that do nothing for our physical development, is not what is to be expected of a people having the degree of intelligence that we pride ourselves upon possessing. When, a little while ago, the captains of industry consigned the human body to the scrap heap, along with the flail, the spinning wheel, the street ear horse, and other discarded implements of a bygone age, it should have occurred to us, as students of evolution, that a body developed to its present type by ages of strenuous exertion might not thrive on idleness, and that intelligence, now all in all, might not thrive in this world without a fairly good body. Even if we had not reasoned so far, we have read history, and history tells us of many a nation that has conquered all of its neighbors by strength of arms, and then has been vanquished and exterminated by the softened environment of peaceful life. History tells us, in fact, that every race that has ever become civilized has degenerated and disappeared just as fast as the individuals revel in luxury and become feeble in body.

But it is not necessary now to foresee what must occur, for it is already happening in plain sight. We have already become a nation of weaklings. To quote from Drummond, "Whereas, once all men were athletes, now we have to pay to see one." By the time

that the average man of to-day is thirty-five years old, baseball and lawn tennis are too violent exercise for him; by the time he is forty-five, croquet and golf are rather severe. Not over one woman in four hundred ever rises to the physical level of lawn tennis or baseball, and few after twenty-five are equal to golf or croquet. Hundreds are so completely deprived of muscular exercise that they never rise above the convalescent stage of health, with a buggy ride as the limit of endurance.

This is not from any inability to be strong. There are to be seen enough sturdy and vigorous Americans of both sexes to serve as examples of what we might all be. Our athletes, both amateur and professional, compare favorably with those of other countries and with those of former times, showing what the possibilities are. In the busy world we can find many such examples as President and Mrs. Roosevelt,—people whose deliberate purpose has been to make themselves equal, by their own habits of life, to the duties of American citizenship.

The weakness and lack of development that inevitably follow a sedentary life cause in turn a weakness of the great vital functions of the body: circulation, respiration, digestion, nutrition, and excretion. This weakens all of the tissues of the body, making them less able to resist the attacks of disease germs. This is why grip, pneumonia, consumption, and appendicitis are holding their own in spite of greatly improved sanitary conditions. Apoplexy and heart failure are on the increase because of common lack of development. Nervous diseases, such as chorea, melancholia, hysteria, nervous prostration, and insanity are on the increase, and entirely new nervous diseases have recently made their appearance.

There is a marked decrease in the number of children in the families of the more intelligent and well-to-do people of today. The census reports show that American born women have on an average only half as many children as foreign born women now living here. Besides the greater number of American women that never marry, there is a large percentage of families with no children and a very high percentage with only one or two. The result is that in some sections the pioneer families are dying out. This condition of things has been attributed by some to the greater intelligence and higher ideals of the people, and by others to the narrow selfishness and scramble for wealth and for frivolous pleasures. In the last analysis the true cause is probably to be found in the greater decrease in the bodily vigor of the American women. The bearing of normal healthy children requires and probably always will require considerable bodily strength and endurance. It is not

surprising that intelligent American women, realizing the extent of their own bodily weakness, hesitate to assume the duties of motherhood, with all the risks that it involves.

Civilization is justly proud of its achievements in sanitation, through which cholera, yellow fever, smallpox, the bubonic plague,—the diseases that thrive in the midst of filth,—have been banished, and the manner of this achievement might well be imitated in this case. By a campaign of education there was added to the moral code and to the social code the principle that *uncleanness is crime*; and wherever this code prevails the once dreaded plagues are unknown. Now we must by similar campaign of education, add to the moral code that *bodily weakness is crime*, because it leads to the downfall of society as surely as either filth or fraud. And it must be added to the social code too: for as long as a principle of conduct is merely a matter of morals many will shirk, but they all bestir themselves to get in line whenever it becomes a matter of etiquette. Just as soon as good physique becomes the fashion, and anyone with a weak body is ostracised by good society, just as it now ostracises anyone with dirty clothes, the standard of national physique will begin to rise.

CHAPTER II

MEANS OF BODILY IMPROVEMENT

There are at least three ways in which the physique of the American people may be improved. The first of these is the choice of more active and healthful occupations. In place of the rush to the cities and the choice of occupations that are highly specialized and that involve little or no muscular exertion, there should be more intelligent recognition of the importance of the question as to whether an occupation is conducive to healthful living. Agriculture, one of the most healthful and useful of occupations, has lost its popularity in recent years, but its hardships are rapidly becoming less severe as conveniences in transportation and household work make progress, and there is taking place at present a tendency in the opposite direction. Looking in this direction, the department of agriculture of the United States government is trying to popularize the study and practice of scientific agriculture, with the object of encouraging a larger percentage of our people to live in the country. It is a part of the province of physical education to promote the choice of active and healthy occupations as well as to provide exercise for those who need it.

A second line of activities that is useful in improving the physique of the American people is that of active plays and games and outdoor recreations. These exercises are always popular among those who have had a chance to know them, because the race inherits a fitness and inclination for them. Teachers of physical education should help as far as possible the promotion of outdoor recreations of the more vigorous type.

Gymnastic exercises constitute the third group of agencies for the betterment of national physique. These exercises have the advantage of being at all times under the immediate and complete control of the teacher, who can vary the kind and quantity of exercise to suit the needs and interests of the pupils.

Here are included the corrective and educational movements of school gymnastics, the various forms of military drill, the heavy apparatus work of the German Turners, and many other exercises managed and controlled in the same way. The exercises are usually taken by the whole class in unison, enabling the teacher to handle

large numbers at once and to provide suitable exercise for more people in a small space than can be given in any other way.

SYSTEMS OF GYMNASTICS

During the last twenty years several systems of gymnastics have been on trial in schools and colleges, and of these the Swedish and the German systems have gradually forged to the front. Each of these two systems fills a place, the Swedish being most useful for correction of posture and the German more popular for all around development and training of the body. The Swedish includes a few exercises chosen with great care, while the German system includes an almost unlimited number of exercises; each exercise in Swedish is devised for a particular purpose, while this is not true of the exercises of the German system. In the Swedish gymnastics, apparatus is used sparingly and only so as to give certain physiological effects; in German gymnastics apparatus is used extensively to stimulate interest in exercise. The Swedes claim that their exercises can not be improved upon, and therefore any other exercise must be inferior; the Germans welcome the invention of new exercises, and believe in a wide range of gymnastic training rather than a narrow one.

SWEDISH GYMNASTICS—GENERAL PRINCIPLES

The Swedish system of gymnastics represents the most thorough attempt ever made to discover all of the bodily conditions common to school children and students that can be improved by exercise, and to devise a system of exercises to meet these conditions. The following principles are emphasized:

(1) The main object of gymnastics is to improve the conditions of the vital organs; strength of muscle is to be gained incidentally.

(2) Exercise should not begin or end suddenly, but should increase gradually to a climax and then gradually decrease.

(3) Exercises should be carefully graded, so that the easier exercises will lead up to and prepare for the more difficult ones.

(4) School life causes not only a general lack of vigor, but also gives rise to definite faults of posture and development, calling for definite corrective exercises.

(5) Exercises should be used only when they are known to produce good effects on the body; never because they are pretty or amusing.

(6) Gymnastics should be conducted by command rather than by having the teacher lead in the exercise or by having pupils memorize them.

In accordance with these principles the authors of the Swedish system have selected and defined about thirty gymnastic positions, formulated a system of names and commands for them, and devised a standard form of lesson plan which they follow in every lesson and which they call the "Day's Order."

POSTURE

NORMAL POSTURE.—To understand the significance of posture one must bear in mind that the framework of the body consists of a great many separate bones, so joined as to admit of free movement, and poised upon a small base below. In the trunk we have an exceedingly flexible column of twenty-four vertebræ, separated by elastic discs, resting upon the pelvis; this in turn, is poised upon the bones of the lower limbs. The base is so small that any deviation from a vertical position necessitates a deviation of another part in the opposite direction. In normal posture there is no deviation laterally, while in the antero-posterior direction the trunk shows three normal curves: one in the lumbar region that is concave at the back, one in the region of the chest that is convex at the back, and one in the region of the neck that is concave in the same direction.

HOW NORMAL POSTURE IS MAINTAINED.—The weight of the upper parts of the body are constantly tending to deepen the normal curves and any others that may be present accidentally, so that normal posture must be maintained in constant opposition to the force of gravitation, and at the expense of a considerable amount of energy.

The first essential of good posture is evidently strong and correctly shaped bones. The disease of children commonly called rickets, in which the bones are weak, often leads to bad postures; certain diseases of the bones in later life have similar effects. Another essential of good posture is the complete set of ligaments which bind the system of bony discs into a movable but inseparable column. A broken ligament makes normal posture impossible as well as a broken bone; yet bones and ligaments avail nothing unless they are held in proper position by the contraction of the muscles. The elasticity of the muscles aids somewhat to hold the body erect, but it is their contraction under control of the nervous system upon which most depends. If this were not so, one fainting or falling asleep would not lose his erect posture.

ORIGIN OF THE NORMAL CURVES.—Every young child learns to stand erect as a voluntary movement, but in the usual way it soon becomes reflex by practice. While the child is creeping, the thighs

are bent forward at a sharp angle with the trunk, and the spinav column presents one continuous curve from the head to the pelvis, except that when the head is held up the curve in the region of the neck takes the form that is to be normal. During the weeks and months that precede the erect position, the muscles and ligaments about the hip joints have been growing and becoming more firm and strong, so that when the child first tries to straighten up on his feet, those on the front side of the hip do not yield readily, but hold the pelvic basin tilted forward. This necessitates the bending backward of the trunk in the erect position, giving rise to the normal curve in the lumbar region. The convex curve in the region of the chest is the original curve. The posture a child has when he first stands and walks is usually perfectly normal, but the amount of the lumbar curve is sometimes too great when the child has remained in the creeping stage too long, making it impossible for him to sufficiently extend the hip joints.

ROUND SHOULDERS.—This is the most common defect of posture caused by school life. It consists in part in a drooping forward of the head, reversing the normal curve of the neck, and increasing the curvature in the upper part of the chest. The shoulders are often drawn forward too, contracting the chest and rounding the back. The first part of the defect,—the drooping of the head, is due to the weight of the head not being supported by the weak muscles, and to the habit of bending over a book or other work; the position of the shoulders is caused by the habit of holding the arms forward and using them much in this position. This shortens the muscles on the front of the chest and stretches those on the back, pulling the shoulder blades forward.

The chief objection to round shoulders is its effect on the chest. Two groups of muscles, the scaleni and the sterno-mastoid, pass from the head and the vertebræ of the neck to the two upper ribs and the sternum, and normally act as supports for the chest, holding it up and thus giving it a large capacity. When the head droops forward these supports are without their upper point of vantage and allow the ribs to sink. The abnormal deepening of the curve of the spine in the chest region also acts to depress the ribs. All this flattens the chest in front, lessening the range of the breathing movements and leaving some of the upper parts of the lungs unused. The other organs are crowded and their action hindered. General vitality is lessened and tendency to lung diseases is especially increased.

HOLLOW BACK.—This is an exaggeration of the lumbar curve of the spine. It is sometimes due to the pelvis tipping forward too

far, probably the result of learning to stand too late, after the tissues at the front of the hip are too strong to admit of extending these joints. Sometimes the fault is due to weakness of the abdominal muscles; more often to the habits of allowing the hips to sway too far forward and the shoulders too far backward.

Hollow back causes the spinal column to have less supporting power than it should have, and often occasions pain in the small of the back. The pain is usually believed, by the subject, to be due to weak back muscles, but this is not the case; the weight of parts above is transmitted, not through the whole extent of each vertebra, but by a small margin at its posterior edge, causing excessive pressure and often pain. Hollow back also tends to cause round shoulders, because it puts the shoulders so far back that the head must be drooped forward to keep the balance.

LATERAL CURVATURE.—Lateral deviation of the spine also weakens it, and if the amount of curvature is great, it is apt to cause compression of the spinal nerves where they pass out at the sides of the vertebræ, causing pain, cramp, or paralysis of the parts to which the nerve goes.

Lateral curvature of the spine is often caused by the pelvis not being held at the same height on the two sides. The spine starts upward at right angles to the line joining the hip joints, and if these two joints are not at equal height there must be a curve convex toward the side of the lower hip. This may arise from inequality in the length of the lower limbs, or from the habit of standing on one foot with the opposite hip held up or dropped down. A lateral curvature may also result from habits of position due to occupation, as when the head is held to one side in writing the slanting style of penmanship, or when a weight is habitually carried in one hand or under one arm. Waiters in restaurants and women who carry babies often acquire lateral curvature from always carrying the weight on the same side.

GENERAL CAUSES: MUSCULAR WEAKNESS AND FATIGUE.—The prime factor in faulty posture, ever present and unavoidable, is the force of gravitation. It follows that anything that causes the muscles to be deficient in power and efficiency is an important factor in the causation of all kinds of bad postures.

Muscular weakness is evidently a serious evil in this connection. No one who lacks the strength of muscle to hold himself erect, can be expected to maintain good posture habitually. No one can stand erect for an indefinite time. It is a mere matter of time when the strongest will fall from complete fatigue. We all avoid such extreme fatigue by spending nearly one-third of our time

in bed, where all the muscles can be relaxed, and by varying our positions while standing, sitting and walking, so as to rest some of the muscles while using others. The natural tendency to avoid the fatigue of holding one fixed position is one cause of the restlessness of children; they seldom acquire bad postures until we have taught them to stand and sit still. Such occupations as writing, sewing, reading, etc., are apt to cause bad postures, partly because the positions assumed in them are bad, but still more because they bring on fatigue of the muscles that are used in holding good posture. The great problem of preventing bad postures is the problem of avoiding excessive fatigue of the supporting muscles.

GENERAL CAUSES: OCCUPATION.—Next to weakness and fatigue, occupation is the most important cause of bad postures. When muscles are habitually used in a certain position, they tend to grow into the form given to them in that position. For example, when one works most of the time with the head bent forward to look closely at something, the muscles on the back of the neck, as they are gradually renewed in the repair that accompanies and follows work, come to be longer than they formerly were; when the arms are used vigorously in a forward position, as in pushing a lawn mower, the muscles in front of the chest gradually grow shorter, unless they are also used in some other way to counteract the tendency. It is evident that these effects of occupation are much more marked in the young than with older persons, and at the same time the possibility of correction by gymnastic exercises is much greater during the earlier period.

THE THREE STAGES.—In the history of a case of bad posture resulting from occupation or habit there are three stages. In the first or transient stage, the posture is taken because circumstances favor it. For example, the pupil droops forward as he writes, and the clerk leans sidewise against the counter, but each leaves the position as he leaves the place and the occupation. He can stand well, and usually does so. In the second or habitual stage the position so often assumed seems to be the natural and correct one. The bad posture goes with him, and he feels unnatural if he stands erect. He has the muscular strength to straighten up, but he has forgotten how to do it; his muscular sense tells him he is straight when he is not. The effect of the posture is worse than before, simply because he holds it all the time instead of occasionally. In the third or permanent stage the muscles and perhaps the bones have adjusted themselves to the abnormal posture, and he lacks the strength to correct the defect, even when he is taught how.

In the first stage it is only necessary to see that no bad posture becomes habitual. This demands watchfulness on the part of the teacher, and caution given in time. To be taught the correct standing position is a great help here. In the habitual stage one must learn over again the correct posture he once learned as a child, and must practice it until it becomes habitual again. In the third stage the work of the second must be done, but it has to be preceded by a course of treatment including outside force to aid in the straightening; even then improvement is slow and complete recovery is doubtful.

REMEDIAL MEASURES: GENERAL.—Since muscular weakness plays such an important part in the causation of bad postures, the general development of the muscles that are used in maintaining normal posture must be of first importance. Swedish gymnastic exercises are intended to accomplish this purpose; other forms of exercise are also useful.

Among exercises that are especially good for all forms of bad posture are those where the weight of the body is suspended by the arms; here the tendency of the weight is to straighten rather than to increase the curvatures. The most valuable single exercise is the fundamental standing position of gymnastics. In teaching this exercise the individual faults of the pupils are pointed out and each is aided in the correction of his own; when one has learned this position he is much less apt to reach the habitual stage of any bad posture he may happen to assume, for he knows the correct position and is able to assume it at any time when he finds himself in a bad posture. Pupils should be tested individually, and given to understand that it is expected of them to know how to assume the correct fundamental position at any time; pupils unable to do so should be given individual help, outside of class hours if necessary. Often it is necessary to push the pupil into the correct position and then have him try to hold it for a short time; in this way he will gradually gain the strength and the coördination.

REMEDIAL MEASURES: SPECIAL.—If the cause of any particular defect is evident, it is of course best to try to have it removed; the posture will not yield promptly to treatment if the cause continues to act. For example, a lateral curvature caused by a short limb should first be treated by adding a lift to the shoe to equalize the length; but in lateral curvatures the causes and the special forms of treatment are so difficult to master that only a specialist should attempt more than general measures. With round shoulders and hollow back the case is simpler, and an intelligent teacher with a fair knowledge of Swedish gymnastics should be able to give effective

help in the earlier stages. Here the Swedish system provides special corrective exercises: the Arch flexions for round shoulders, and the Back and Abdominal exercises for the hollow back.

Often a lateral curvature in the habitual stage can be corrected by using an auxiliary or "Key-note" position. This is sometimes raising one arm upward, or taking a fallout. By trying all kinds of arm and foot positions, one can usually be found which gives the spine a perfectly straight position. Now have the pupil take this "Key-note" position and then try to return to fundamental position while holding the spine in the straight line that the position enables him to get. Repeated practice of this kind is often successful in early stages.

CHAPTER III

TEACHING

COMMANDS—THEORY

One of the first and most important things for the teacher of gymnastics to master, and yet not a difficult one, is the giving of commands.

For many years the movement of soldiers in training and in war has been controlled by command, and the experience of military officers has brought the theory and practice of commands to a high degree of perfection.

Each command consists of:

(a) An explanatory part, which should give all necessary information of what is to be done;

(b) A pause, long enough for pupils to fully comprehend what has been said; and

(c) An executive part, which is the signal for action. For example: *Arms sideward,—Raise!*

Commands are worded as if addressed to one individual, and the name or title of those addressed is not mentioned unless different individuals are commanded to do different exercises at the same time, as in trunk bending backward with support (See page 65). One exception is the command *Class,—Halt!* Here the word "Class" is used as a warning signal in the absence of a command of explanation.

In giving commands the explanatory part should be spoken in a clear and animated tone, preferably at about the speed of common conversation, and should close with a slight falling inflection, to indicate that the explanation is completed. The executive command should be distinct and vigorous (not necessarily louder than the former part), and should end with a slightly rising inflection, because this gives a more pleasing effect and makes the voice heard more easily than the falling inflection. Example, *Arms Sideward,—Raise!* Teachers should cultivate a clear, strong, and pleasant voice and should habitually use a quality of tone that expresses interest in the work.

The most common faults of beginners in the giving of commands are:

(a) Too short a pause between the two parts.

This arises because the teacher, familiar with the exercise, fails to realize that it is new to the pupils and that they require time to recall the meaning of the explanatory command. The signal for action coming before they are ready, they fail to respond in unison and fall into the bad habit of watching one another in place of giving attention to the commands. The quicker and more complex the exercise, the longer the pause must be. For example: *Heels,—Raise! Hips,—Firm!* Special cases and exceptions will be pointed out as they occur.

(b) An indifferent tone.

Pupils judge the relative importance of exercises and the teacher's interest in them by the tone in which the commands are given. Only commands for resting and dismissal should be given in an indifferent tone; in all other cases it should indicate a lively interest on the part of the teacher. Teachers are especially apt to drop to an indifferent tone on return commands and so slight the fundamental position with which each exercise should close.

(c) The commands are not plainly audible.

This is sometimes due to a weak voice, sometimes to careless enunciation, and sometimes to pitching the voice on too low or too high a key.

There are other faults to be avoided, such as a scolding tone, too loud and imperious a voice, and various personal mannerisms. Any of these faults can usually be overcome by practice.

COMMANDS—PRACTICE

After studying the above explanations of the theory of commands, students should practice speaking the commands for the gymnastic positions on pages 29 to 42, taking care to follow the above directions exactly and to avoid the common faults. In recitation, students will give the command for fundamental position, for the exercise and the return, and finally leave the pupils at rest.

DEMONSTRATION—THEORY

The first step in the teaching of a new exercise is to give the pupils a mental picture of what is to be done. The degree of success that will attend the first attempt of the pupils to perform the exercise will depend largely upon the clearness of their mental picture of it.

To produce the most clear and vivid mental picture of anything it is necessary to appeal to the eye; in other words, the new exercise must be shown. This requires that the teacher be able

to perform the exercise accurately. Often it must be seen by the pupils from more than one side.

At the same time the essential things about the exercise must be told, to prevent the pupils from emphasizing non-essentials; this should be done in an energetic and interesting way, while the exercise is before their eyes. If the exercises have a definite purpose that the pupils are able to understand, it is important that this should also be mentioned, since it explains why certain points are essential while others are not.

Since clearness involves simplicity, the teacher must take pains not to talk too much nor too long, but give the idea in the shortest time and in the fewest possible words.

DEMONSTRATION—PRACTICE

After studying the above theory, students should practice demonstrating the Swedish Gymnastic Positions given on pages 29 to 42, in the order in which they are given. This will require a careful study of the descriptions of these exercises and of the illustrations, to make sure that the teacher's mental picture of each is clear and accurate.

It is well to give the command in connection with the demonstration, to gain further familiarity with the commands.

NOTATION IN GYMNASTICS—THEORY

Teachers need to use written symbols to represent the exercises. It saves time and space to abbreviate the names of the exercises. In abbreviating these names the following principles are used:

(1) The common custom of closing each abbreviation with a period is not followed.

(2) As far as possible without causing any confusion, the initial letter of an exercise or a direction is the abbreviation for the full name; for example, F for feet, s for sideward, u for upward, etc.

(3) Capitals are used for designating the parts of the body, and small letters in other cases. This distinguishes F, feet, from f, forward; B, the back, from b, backward, etc.

(4) Where exercises have the same initial, we secure clearness by using enough other letters. Examples, std for stride, str for stretch, ch for change, cmd for circumduction, etc.

LIST OF ABBREVIATIONS IN ALPHABETICAL ORDER

A, arm or arms.	m t, mark time.
ab, about.	Nf, neck firm.
al, alignment.	num, numbering.
B, the back.	op, open.
b, backward.	ord, order.
bd, bend.	o, outward.
br, breathe or breathing.	pos, fundamental standing position
ch, change.	pl, place or placing.
cmd, circumduction.	pt, parting.
d, downward.	prep, preparation for.
F, foot or feet.	r, right.
fal, fallout.	rk, rank.
f, forward.	rpl, replace.
fc, face or facing.	rse, raise.
fl, fling or flinging.	rot, rotation.
H, head or heels.	sit, fundamental sitting position.
Hf, hips firm.	s, sideward.
hor, horizontal.	std, stride.
hg, hang or hanging.	str, stretch.
incl, incline.	snk, sink.
jp, jump.	sp, spaces.
K, knees.	stnd, stand or standing.
L, legs.	stp, step.
l, left.	sup, support.
ln, lean or leaning.	sw, swing.
ln hg, lean hang.	Tr, trunk.
mch, march or marching.	tw, twist.
mch rr, march to the rear.	wk, walk.

NOTATION IN GYMNASTICS—PRACTICE

By a study of the names and abbreviations of exercises used thus far, prepare to write the abbreviations for any of these exercises the teacher may show or command. Be ready also to give the correct commands for such exercises.

OBSERVATION AND CRITICISM—THEORY

It rarely happens that one is able to perform a wholly new exercise accurately the first time, no matter how clear a demonstration of it has been made. The process by which one learns a new exercise is called coördination. It involves control of the muscles

in new combinations and a training of the muscular sense,—the sense by which we get direct knowledge of the position of our joints and of the force with which our muscles are contracting. We try to make the new movement several times, and gradually gain in accuracy by recognizing our faults and correcting them.

By practicing many times we may acquire the ability of taking the exercise correctly without directing our attention to it. The movement is then said to be reflex. The learning of a new and simple movement is seen therefore to include three stages: (*a*) Getting a clear mental picture, (*b*) Perfecting the coördination, and (*c*) Making it reflex.

Success in perfecting the coördination depends largely on how promptly and clearly the pupil recognizes his mistakes as he tries to take the exercise. Since he can see his own positions to but a slight extent, he will learn much faster if some one can tell or show him how far his attempts are successful and to what extent they are faulty. This stage of the teaching, therefore, requires of the teacher two things:

(1) Observation of the class as the exercise is taken, with the object of discovering where the movement is accurate and where it is inaccurate. This is probably the most difficult of all the duties of the teacher of physical training. Before he can do this successfully he must not only have a very clear concept of what the exercise should be, and such a mastery of the commands that he can give undivided attention to the work of the pupils, but his eye must be trained to observe exercises and detect mistakes quickly.

It is an aid to the teacher to keep the most common faults in mind; for this purpose the faults that are most common are given here along with the definitions of the exercises.

The custom of leading the class in the exercises, which is habitually followed by some teachers of gymnastics, is inevitably fatal to the best results in this stage of the teaching because it takes the attention of both the teacher and the pupils away from what all should be watching, viz: the work the pupils are doing. The mental picture should be made so clear and vivid that this continuous leading is unnecessary.

Some exercises can best be observed from the front, some from the rear, and some from the side. This makes it necessary for the teacher to move about as the work goes on. The common custom of sitting before a class causes teachers to feel that they should stand or sit in front of a class to give commands, but this is not at all necessary. It is well to have the class face in all four directions during

the lesson, since it prevents pupils from forming the habit of imitating those in front of them, and also places all near the teacher a part of the time when new exercises are shown.

(2) Criticism of the work of the pupils.

The object here is to give the pupils the benefit of what the teacher has learned in observing their work. The attitude of the teacher in making these criticisms should be one of encouragement and enthusiastic helpfulness. The word "criticism" does not mean fault finding, but the giving of a true estimate of the degree of success the pupils have reached in their attempts to do the work. A class can be kept wide awake and interested by keeping them informed all of the time of the progress they are making. Faults of course must be noticed, but as the work improves the class should be told of it and especially good work commended.

Criticism of faults in an exercise should be specific, stating exactly what is the matter in the clearest possible way. An objective showing of the fault in contrast with the right way of doing it is often the clearest and the quickest way.

The first faults to be criticised are naturally those that are general; they should be mentioned in a general remark to the whole class. Individual mistakes require help for each pupil, which can usually be given by word but sometimes best by direct assistance with the hand. The latter is especially true of posture of the trunk. As a general principle it is well to give more individual criticisms to older pupils and more general criticisms to younger children, since children sometimes misinterpret the personal attention.

OBSERVATION AND CRITICISM—PRACTICE

Having carefully studied the above theory, students should now practice observing and criticising the Swedish gymnastic positions on pages 29 to 42, in the following manner: working together by twos, one acting as teacher and the other acting as pupil, then changing places; one acting as teacher gives the commands, the pupil takes the exercise, and the teacher observes and criticises the work. Each is expected to show in recitation that he has acquired the ability to do this effectively.

CHAPTER IV

THE SIMPLE GYMNASTIC POSITIONS

(1) FUNDAMENTAL POSITION. (Pos.) Fig. 1.

Command, *In position,—Stand!*

Heels together, or nearly so, toes turned out making an angle of from 45 to 90 degrees; entire body erect, inclined slightly forward from ankles; knees extended, hips drawn back, chest high, head erect, chin in; shoulders held back and down at the same level, arms hanging freely at the sides, wrists and fingers extended but not too stiff, palms resting against the sides of the thighs.

Return command, *In place,—Rest!* or *Class,—Rest!*

Move right foot one foot length to the rear and assume an easy posture without leaving floor position.

Purpose: To cultivate normal posture and to serve as a starting position for other exercises.

As a posture exercise, fundamental standing position aims to do three things:

(1) To strengthen muscles used in holding good posture;

(2) To stretch some tissues and contract others, so as to correct the effects of bad postures;

(3) To train the muscular sense and the proper nerve centers so that correct posture will be taken reflexly.

Fundamental position is the most important of all exercises for improving posture; in fact, other posture exercises are useful only as they enable one to take fundamental position more easily and accurately. Because of its importance it is customary in Swedish Gymnastics to give it before and after each exercise; it is agreed that it is not to be sacrificed in the taking of any other exercise.

To criticise fundamental position effectively it must be viewed from two directions: From front or rear and from the side, the latter being more important. Viewed from front or rear there should be bilateral symmetry: weight equally divided between the feet, spinal column straight and vertical, and hips and shoulders at the same height on each side and equally distant from the spine on each side. Viewed from the side, the general line of the body should



Fig. 1
Fundamental
position

be straight from head to heel with inclination forward at such an angle as will bring the center of gravity of the body over the balls of the feet; the spinal column should exhibit the three normal curves: cervical, dorsal, and lumbar. The poise is tested by rising on the toes; if one has to sway forward or back before rising, the weight was not over the balls of the feet.

FAULTS: Seen from the side: (See Fig. 2.)

- (a) Weight poised too far back,
- (b) Hips and abdomen too far forward,
- (c) Head too far forward,
- (d) Arms and hands too far forward.

Seen from the front or rear:

- (a) Weight not evenly divided,
- (b) Uneven hips or shoulders,
- (c) Head held to one side

The combined effect of the first group of faults is to flatten the chest and lessen the range of the breathing movements; at the same time the organs in the body cavity are crowded and their action hindered. The combined effects of the second group is to cause lateral curvature of the spine, which lessens its supporting power and in severe cases causes pressure upon the spinal nerves where they pass out from the spinal canal.

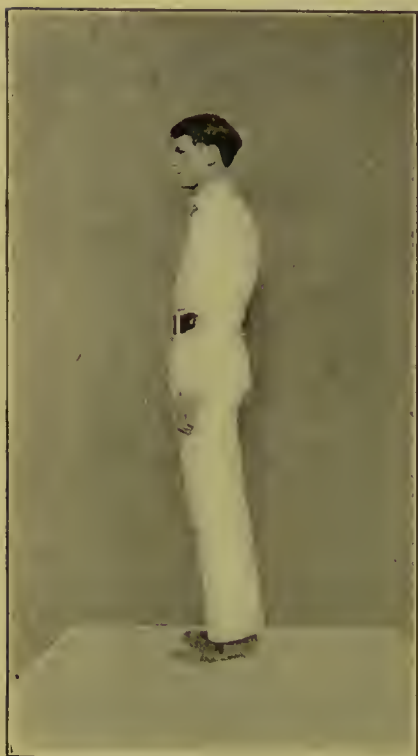


Fig. 2
Faulty standing position

(2) FUNDAMENTAL SITTING POSITION. (Sit.) Fig. 3.

Command, *In position on the bench* (or chair or school seat),—*Sit!*

Pupils promptly seat themselves and at once assume erect position of the trunk as described for fundamental standing position.

At the command, *In place*,—*Rest!* an easy posture is assumed. Return command, *In position*,—*Stand!*

Purpose: To furnish a starting position for certain exercises that can be taken from it to a better advantage than from standing position.



Fig. 3
Fundamental sitting position

Faults: The most common fault in this position is letting the pelvis tip back, taking out all the normal lumbar curve of the spine and giving what is called the "rocking chair" position.

(4) FALLOUT FORWARD. (fal f.) Fig. 4.

Command, *Right (or l) forward,—Fallout!*

The foot is lifted and placed forward three foot lengths, toes turned out at the same angle as in fundamental position, heels on the floor; forward knee bent until it is vertically over the toe; trunk and rear limb in straight line from head to heel; face and shoulders squarely to the front. The body should remain straight and fall forward as the foot is lifted.

Return command, *Foot,—Replace!*

In returning to position the body remains straight as before, and is brought to the vertical position by a spring made by suddenly extending the ankle and the knee.



Fig. 4
Fallout forward with
hands on hips

(5) FALLOUT SIDEWARD. (fal s.)

Command, *Right (or l) sideward,—Fallout!*

This fallout is taken like the other except that the foot is moved



Fig. 5
Fallout sideward



Fig. 6
Fallout outward

sideward and the body is inclined sideward in the same direction, while the face and shoulders remain turned to the front.

(6) **FALLOUT OUTWARD.** (fal o.)

Commands like the preceding except as to direction.

This fallout is defined like the others except as to the direction; the foot is placed diagonally, midway between forward and sideward. Face and shoulders are turned to the front,—not in the direction of the foot.

Purpose: (a) To cultivate the muscular sense and the ability to coördinate good posture; this is accomplished by the practice it gives in holding the trunk in its correct form while it is out of vertical position; (b) to serve as a starting point for certain exercises; (c) to serve as warming up exercises when taken rapidly in series.

Faults: In criticising fallout positions the teacher should observe them from all directions and should keep in mind all of the points specified in the definitions, as all of these points are apt to be wrong, and all are important. In the outward fallout, which is

much the most difficult of the three to take, there is a special tendency to turn the face and shoulders toward the foot, instead of keeping toward the front, thus making it merely a forward fallout with a turn of 45 degrees.



Fig. 7
Leaning position

(7) **LEANING POSITION.** (ln.) Fig. 7.

Command, *In leaning position with hands on desk,—One! Two!*

The command is given while the pupils are standing between the desks and the movement is executed in two parts: at the command *One!* the hands are placed on the desks, and at the command *Two!* the feet are placed backward, bringing the body to the position shown in Figure 7, with the weight resting on the arms and the body straight from head to heels.

Return command, *In position,—Stand!* The feet are placed forward and the hands are immediately removed from the desks. The return may be commanded and executed in two parts if the teacher prefers.

Purpose: To exercise the abdominal muscles and to cultivate posture.

Faults: Body not kept straight.

(8) **HANGING POSITION.** (hg.) Fig. 8.

Command, *Hands over head,—Grasp! Feet,—Raise!*

With the hands grasping some bar, ladder, or other support overhead, the feet are raised from the floor so that the weight is borne by the arms. The pupils may, in some cases, jump and catch the bar; sometimes they may climb up the wall ladder; and sometimes they stand on a bench and this is removed when the feet are raised; then the feet can hang freely.

Return command, *In position,—Stand!*

Purpose: To aid in chest expansion; (b) to serve as a starting point for other exercises, especially abdominal exercises.



Fig. 8
Hanging position



Fig. 9
Leaning hang position

(9) LEANING HANG POSITION. (In hg.) Fig. 9.

Command, *Backward,—Lean!*

Given while class stand close to a wall ladder or other object of support, with hands grasping bar and elbows completely flexed. When the class is close to the wall ladder and facing it the command may be, *Hands on round at height of eyes,—Place! Feet on lower round,—Place! Arms,—Stretch!*

At the command *Stretch* the arms are extended and the body leans backward as far as the arms will permit; body remains straight as in fundamental position.

Return command, *In position,—Stand!*



Fig. 10
Incline backward

Purpose: (a) To exercise back muscles; (b) to cultivate posture.

Faults: Body not held straight.

(10) INCLINE BACKWARD. Fig. 10 and Fig. 11.

Command, *Backward,—Incline!*

Given while pupils are in stride forward, sitting position with foot support, or in half kneeling or kneeling position. When taken from sitting, half kneeling, or kneeling position the trunk inclines slowly backward, all the normal curves of the spine remaining unchanged. When taken from the stride position the rear knee is bent and the entire body leans backward, with body straight from head to the forward foot.

Return command, *Trunk,—Raise!*

Purpose: (a) To cultivate normal posture; (b) to develop the abdominal muscles.

Faults: (a) Head drooped forward; (b) back hollowed; (c) trying to incline too far, causing faulty position and strain. When taken from sitting position, the feet must be supported to prevent falling backward.



Fig. 11



Fig. 12
Head backward

(11) HEAD BACKWARD. Fig. 12.

Command, *Head Backward,—Bend!*

The head is held erect and moved backward as far as possible. Return command, *Head,—Raise!*

Purpose: To correct round shoulders and to raise the chest. "Round shoulders" is a defect of posture that seriously affects the health, because it flattens the chest and lessens the range of the breathing movements. Habitual flattening of the chest leaves many air cells without fresh air, a condition favorable to the growth of disease germs.

Faults: (a) Raising the chin too high; (b) bending the lower part of the spine, thus sacrificing the fundamental position. This may be avoided by having the beginners take the exercise at first while sitting in the school seat, where the back of the seat prevents the fault.



Fig. 13
Trunk backward

(12) TRUNK BACKWARD. Fig. 13.

Command, *Trunk backward,—Bend!*

Like the preceding but more extended, the backward bend beginning in the neck and extending down into the region of the chest.

Return command, *Trunk upward,—Stretch!* or *Trunk,—Raise!*

Purpose: Same as the preceding.

Faults: The bend extends too low, so as to hollow the back; this is to be avoided by having the pupils assist each other, taking a position known as "Support." (See page 65.)

(13) TRUNK FORWARD. Fig. 14.

Taken only from stride position sideward.

Command, *Trunk forward,—Incline!*

The trunk is inclined forward, the movement taking place in the hip joints only, as far as the hips can be flexed; normal curves of spine are maintained, and head, shoulders, and trunk held in the same relative positions as in fundamental position.

Return command, *Trunk upward,—Stretch!* or *Trunk,—Raise!*

Purpose: To cultivate the correct posture of the spine and develop and train the muscles of the back, which are the ones chiefly involved.

Faults: Hips not completely flexed; normal posture of the spine lost.

(14) TRUNK DOWNWARD. Fig. 15.
Command, *Trunk downward,—Bend!*



Fig. 14
Trunk forward with hands on hips



Fig. 15
Trunk downward with hands on neck

Given while the pupils have trunk forward. The trunk is bent further downward by relaxing the muscles in the small of the back. The relative positions of the head, shoulders, and chest are kept as in fundamental position.

Return command, *Trunk upward,—Stretch!* or *Trunk,—Raise!* The command may also be given while the pupils are in stride side-ward with trunk erect.

Purpose: Same as for trunk forward.

Faults: Failure to maintain the normal position of the head and shoulders.



Fig. 16
Trunk sideward



Fig. 17
Trunk twist with hands on hips

(15) TRUNK SIDEWARD. Fig. 16.
Command, *Trunk to right (or left),—Bend!*

The trunk bends directly to the side, with the relative positions of the head and shoulders unchanged.

Return command, *Trunk upward,—Stretch!* or *Trunk,—Raise!*

Purpose: (a) To cultivate flexibility of the spine; (b) to strengthen the muscles used in maintaining the normal position of the spine; (c) to stimulate the internal organs by variations of pressure.

Faults: (a) Trunk twisted; (b) head not in normal position; (c) one knee partly flexed; (d) leaning backward.

(16) TRUNK TWIST. Fig. 17.

Command, *Trunk to right (or l),—Twist!*

Trunk twisting on vertical axis, not twisting the head or hips.

Purpose: Same as for side bend.

Faults: Twisting legs and hips, and twisting head.

Return command, *Trunk forward,—Twist!*



Fig. 18
Hands on hips



Fig. 19
Hands on neck and stride sideward

(17) HANDS ON HIPS. Fig. 18. See also Figs. 14 and 17.

Command, *Hips,—Firm!*

The hands are placed firmly against the waist, just above the hips, palms on the crest of the hip bone, fingers forward; elbows drawn slightly backward; wrists straight or lower than the line of the hand or arm.

Return command, *Arms,—Down!*

Purpose: (a) To aid in holding the trunk firm; (b) to serve as a convenient position for the hands in exercises in which it is not advantageous to leave them hanging freely.

Faults: (a) Elbows too far forward; (b) wrists too high.

(18) HANDS ON NECK. Fig. 19 and Fig. 15.

Command, *Neck,—Firm!*

Start as in flinging arms sideward, then flex elbows and bring finger tips together at the back of the neck, with head erect and elbows well back.



Fig. 20
Arms bend

Return command, *Arms,—Down!*

Purpose: (a) To aid in chest expansion; (b) to cultivate good posture; (c) to increase the difficulty of other exercises.

Faults: (a) Arms brought up toward the front; (b) head moved forward; (c) elbows not held well back.

(19) ARMS BEND. Figs. 20 and 24.

Command, *Arms,—Bend!*

The forearms are raised sideward, flexing the elbows, which remain close to the sides as possible; the hands are half closed, raised over the shoulders and carried as far to the rear as possible.

Return command, *Arms,—Down! or Arms downward,—Stretch!*

In the latter case the elbows are raised slightly and then thrust downward with force.

Purpose: (a) To aid in chest expansion; (b) to serve as a starting point for arm stretchings; (c) to vary the difficulty of other exercises. This exercise aids in chest expansion only when the elbows are held down and the hands far to the rear at the same time.

Faults: (a) Elbows not held down with enough force; (b) hands not held back with enough force; (c) back hollowed.

(20) ARMS FORWARD. Fig. 21.

Command, *Arms forward,—Raise!*

Arms raised slowly forward to horizontal position, parallel, elbows and wrists extended, palms toward each other.

Return command, *Arms,—Sink!*

Also taken quickly at the command, *Arms forward,—Fling!* and also at the command, *Arms forward,—Stretch!* The latter command is given while pupils have the arms bent, as in exercise 19.

Purpose: (a) Cultivation of posture; (b) to vary the difficulty of other exercises.

Faults: (a) Leaning back at the waist; (b) arms too high; (c) shoulders forward.

(21) ARMS SIDEWARD. Fig. 22.

Command, *Arms sideward,—Raise!*

The arms are raised slowly sideward until they are horizontal, with elbows and wrists extended, palms turned downward, and arms held well back.

Return command, *Arms,—Sink!*

The commands *Fling* and *Stretch* are used in this exercise as in the preceding one, and with the same meaning, the latter command being given when the arms are bent.



Fig. 21
Arms forward



Fig. 22
Arms sideward

Purpose: (a) Cultivation of posture; (b) chest expansion; (c) to vary the difficulty of other exercises. This exercise aids in chest expansion if the arms are held well back, but not otherwise.

Faults: (a) Arms are not at the correct height; (b) arms not held well back; (c) class facing in such a way that collisions of arms occur between pupils.

(22) ARMS UPWARD. Fig. 23.

Command, *Arms forward upward,—Raise!*

Beginning as in raising arms forward, the movement is continued up to a vertical position, with arms extended and palms toward each other.

Return command, *Arms forward downward,—Sink!*

The arms may also be raised sideward upward; in this case the palms are turned upward as the arms pass the horizontal position.

Purpose: (a) Cultivation of posture; (b) chest expansion; (c) to vary the difficulty of other exercises.

Faults: (a) Back hollowed; (b) head forward; (c) elbows not extended; (d) palms forward.



Fig. 23
Arms upward

(23) STRIDE SIDWARD. Fig. 19.

Command, *Right (or l) foot sideward,—Place!*

The foot is lifted, moved two foot lengths toward the side, and placed on the floor, with the line of the foot at the same angle as before, and the weight equally divided between the two feet.

Return command, *Foot,—Replace!*

This position is sometimes taken, in more advanced work, in two counts, moving the left foot on the first count and the right on the second count, each moving one foot length. The command is, *Feet sideward,—Place!*

Purpose: To increase the stability of the standing position.

Faults: (a) Feet not far enough apart; (b) weight not equally divided; (c) one knee bent; (d) feet not at proper angle.



Fig. 24
Stride forward
and bend arms

(24) STRIDE FORWARD. Fig. 24.

Command *Right (or l) foot forward,—Place!*

The foot is lifted, moved two foot lengths to the front, and placed on the floor with the line of the foot at the same angle as before and the weight equally divided between the two feet.

Return command, *Foot,—Replace!*

The foot may also be placed backward in a similar manner and at a similar command.

Purpose: To vary the standing position and to increase its stability.

Faults: (a) Feet too close together; (b) weight not far enough forward; (c) toes not turned out at proper angle.

(25) HEEL RAISING. Fig. 25.

Command, *Heels,—Raise!*

Rise high on tiptoes.

Return command, *Heels,—Sink!*

Purpose: (a) To narrow the base of support, so as to give more difficulty in balancing; (b) to serve as a warming up exercise when taken rapidly in series; (c) to test the poise in fundamental standing position.

Faults: (a) Heels turn out; (b) hips thrown forward.

(26) KNEE BENDING. Fig. 26.

Command, *Knees,—Bend!*

The knees are slowly flexed until there is a right angle at the knee; the knees



Fig. 25
Heel raising with hands on hips

separate as they bend, moving diagonally forward in the direction of the lines of the feet; the heels are lifted a little during the movement, because of the limited movement possible in the ankle joints.

Return command, *Knees,—Stretch!*

Purpose: To cultivate posture and balance.

Faults: (a) Trunk tipped forward; (b) knees held close together.



Fig. 26
Knee bending with hands on hips



Fig. 27
Leg raising

(27) LEG RAISING. Fig. 27.

Command, *Right (left) leg sideward,—Raise!*

The foot is lifted and moved two foot lengths to the side, with knee and ankle extended and the trunk erect. The leg is also raised in a similar way forward, backward, and outward, at similar commands.

Purpose: To cultivate posture and balance.

Faults: (a) Trunk not held erect; (b) ankle not extended.

(28) KNEE RAISING. Fig. 28.

Command, *Right (left) knee upward,—Raise!*

The knee is raised to the level of the hip, hip and knee joints being flexed to a right angle; trunk erect; ankle of free foot extended.

Return command, *Knee downward,—Stretch!*

Purpose: To cultivate posture and balance.

Faults: (a) Trunk not held erect; (b) knee not as high as hip; (c) free foot not extended or too far back.



Fig. 28
Knee raising

SUMMARY OF THE GYMNASTIC POSITIONS

Position of	Entire Body	Fundamental Standing Position. (pos)
		Fundamental Sitting Position. (sit)
		Fallout { Forward. (fal f)
		{ Sideward. (fal s)
		{ Outward. (fal o)
		Incline Backward. (incl b)
		Leaning Position. (ln)
		Hanging position. hg)
		Leaning Hang. (ln hg)
		Backward. (H b)
	Head	Backward. (Tr b)
		Forward, (Tr f)
		Downward. (Tr d)
		Sideward. (Tr s)
	Trunk	Twist. (Tr tw)
		On Hips. (Hf)
		On Neck. Nf)
	Hands	Bend. (A bd)
		Forward. (A f)
	Arms	Sideward. (A s)
		Upward. (A u)
		Stride Forward. (std f)
	Legs	Stride Sideward. (std s)
		Heel Raising. (H rse)
		Knee Bending. (K bd)
		Leg Raising. (L rse)
		Knee Raising. K rse)

CHAPTER V

MISCELLANEOUS EXERCISES

(1) ARM CIRCUMDUCTION.

Command, *Arm Circumduction*,—*One! Two!*

At the command, *One!* the arms are raised forward upward as in the exercise 22 on page 39; at the command, *Two!* they sink sideward downward, turning palms down as the arms pass the horizontal.

Purpose: Chest expansion.

(2) ARM PARTING.

Command, *Arm Parting*,—*One! Two!*

This command is given only when the arms are forward or upward; at the command, *One!* they are quickly separated to the position of arms sideward; at the command, *Two!* they return to the starting position.

(3) ARM ROTATION.

Command, *Arm Rotation*,—*One! Two!*

This command is given when the arms are sideward; at the command, *One!* the palms are quickly turned upward; at the command, *Two!* they return.

(4) BREATHING.

Command, *Deep Breathing*,—*One! Two!*

A deep breath is inhaled at the command, *One!* and exhaled at the command, *Two!*

(5) CHANGE OF ARMS.

Command, *Arms*,—*Change!* or *Change of Arms*,—*One! Two!*

This command is given in a few cases when the arms are not in the same position; for example, if one hand is on the hip and the other on the neck, it is the command for the reversal of the arm positions; it is also used when one arm is upward and the other downward at the side, and in this case there are two movements; first the arms are bent, then stretched to the reverse position.

(6) CHANGE OF FEET.

Command, *Feet*,—*Change!* or *Change of Feet*,—*One! Two!*

This command is used only when one foot has been moved from

the fundamental position, as in a stride or fallout. The exercise is in two counts: first, the foot that was moved away is replaced; second, the other foot is placed in the corresponding position.

(7) CLOSING AND OPENING FEET.

Commands, *Feet,—Close! Feet,—Open! or Feet,—Out!*

At the first of these commands the toes are turned in so that the inner margin of the feet touch; at the second command they are turned out to the usual angle.

(8) SWING OF FOOT.

Command, *Free Foot Forward,—Swing!*

This command is given only when one leg is raised, and the command may be to swing it forward, sideward, outward, or backward. Swing of the free foot is also used in hopping exercises, the foot being swung as the hop is taken.

(9) PREPARATION FOR JUMPING.

Command, *Preparation For Jumping, With Counting,—Start!*

The following four movements are taken in even rhythm: (1) raise heels—(2) bend knees—(3) stretch knees—(4) heels sink. The third count is taken as if to jump, but the toes do not leave the floor.

THE DEVELOPMENT OF COMPLEX EXERCISES

The remaining three of the miscellaneous exercises and some of the tactics that follow are more complex than the preceding, consisting of two or more parts that must be taken in quick succession. Such exercises require something more than a demonstration to fit the class to take them correctly, and the most effective plan of teaching is to develop such exercises in three or four stages, leading up to an understanding of them that enables the class to execute them at a single command.

The general plan to be varied in special cases is as follows:

(1) Demonstrate the complete exercise, if it can be done. This gives pupils a general idea of what they have to learn.

(2) Command the separate parts in their proper order, using the usual form of commands and correcting all mistakes.

(3) Command these parts in the same order, using the numbers, *One! Two! Three!* etc., as the commands of execution and omitting the explanatory command. This tests the knowledge of the class as to the order of the parts and gives further practice and opportunity for criticism. All mistakes should be seen and corrected here.

(4) Give command for entire movement, adding to the explanatory part the words, "*With counting,*" the class counting to aid in keeping the same rhythm.

(5) In some instances the counting may be omitted later. The amount of time to be spent in any one of these stages of development depends of course on the difficulty of the exercise and the age and advancement of the class, but it rarely is of advantage to omit one stage entirely.

DEVELOPMENT—PRACTICE

Use the above method in the teaching of the following three exercises and such of the tactics as require it.



Fig. 29
Half kneeling position



Fig. 30
Kneeling position

(10) HALF KNEELING. Fig. 29.

Command, *On The Right Knee,—Kneel!*

Executed in three counts, as follows: (1) Place the right foot backward; (2) Bend knees until right knee rests on the floor; (3) Place the left foot forward to bring the knee to a right angle. (Figure 29 shows count 2.)

Return command, *In Position,—Stand!*

The three parts of the exercise are reversed.

(11) KNEELING. Fig. 30.

Command, *On both knees,—Kneel!*

This is also executed in three counts, the first two being the same as the preceding; the third count of this movement consists in placing the forward knee on the floor beside the other.

Return command, *In position,—Stand!*

The three parts are reversed.

(12) JUMPING.

Command, *Jump upward,—Start!*

Jumping occupies six counts: (1) raise heels; (2) bend knees; (3) extend knees forcibly, so as to spring upward from the floor; (4) this number corresponds to the time of alighting, and the knees should be bent just as the feet strike the floor, to prevent jarring the body, (see figure 26); (5) extend knees; (6) sink heels.

A turn of 90, 180, 270, or even 360 degrees can be taken during the jump, the words, "*With turn of 90 degrees,*" being added to the explanatory command.

The jump may also be taken forward or sideward without changing the form of the movement, the command using the word *Forward* or *Sideward* instead of *Upward*.

When the jump is forward it may be taken with a running start, and the words, "*with one running step, starting with the left foot,*—*Start!*" Here the count is changed. (1) Take the running step, which finishes with knees bent slightly and heels raised; (2) spring forward; (3) alight with feet together, as in the plain jump; (4) extend knees; (5) sink heels. There must be no pause between counts one and two or the help of the running start is lost.

Faults: (a) Knees not yielding on alighting; (b) Trunk inclined or bent forward on alighting; (c) Feet too far apart on alighting.

GYMNASTIC TACTICS

Gymnastic tactics are exercises for arranging pupils in order and for moving classes in an orderly manner from place to place. Some of them are complex and most of them must be taken very quickly. It follows that commands require special care here, *with a longer pause than usual*. The facings, marching to the rear, and opening and closing order should be *developed*, after the manner of the preceding exercises.

(1) ALIGNMENT FORWARD. Fig. 31.

Command, *Forward,—Dress!*

This command is given only when the pupils are standing in line, one behind another. The front pupil of the line stands fast in position as a guide for the positions of the others; all the others measure the distance by raising the arms forward and moving up until just able to touch the one next in front; at the same time the line is straightened. Pupils stand in this position until the return command, *Arms,—Down!*

By placing one pupil in front of the class to represent a guide, the teacher can demonstrate the manner of measuring distance, as it is to be done by all others.



Fig. 31
Alignment forward

(2) ALIGNMENT SIDEWARD. Fig. 32.

Command, *Right,—Dress!*

This command is given only when the pupils are standing in line, side by side. The pupil at the right end of the line is the guide; he stands still when the command is given, with eyes to the front.

All including the guide place left hand on hip; all the others in the line turn head and eyes to the right and move up until right arm touches the left elbow of the one next on the right; at the same time the line is straightened. When there is more than one line the second line is about 30 inches behind the first; those in the second do the same as those in the front line excepting that they do not measure distance by touching arm to elbow, but each stands directly behind the corresponding one in front; the guide of the rear line measures distance as for alignment forward.

Return command, *Eyes,—Front!*

At the return command all turn eyes to the front and drop the hand to the side, in fundamental position.

By placing a pupil in front of the class to represent a guide, the teacher can demonstrate the manner of measuring distance; by placing two pupils in position for a front line and one for the guide of the rear line, the manner of getting position in the rear line can be demonstrated.

Each pupil should take his place in line as quickly as possible. Pupils may be spaced farther apart by having them extend left arm sideward instead of placing hand on hip. The command is, *Full Arm distance,—Right Dress!*

(3) FACING TO THE RIGHT.

Command, *To The Right,—Face!*

The exercise is in two parts: (1) lift the right toe and the left heel and pivot to the right 90 degrees on the right heel by a whirl of the body and the push of the left toe; (2) lift the left foot and place it beside the right, bringing it in from the side with an accent, which is made by a stroke of the ball of the foot on the floor, made by extending the ankle, the knee being kept straight.

(4) FACING ABOUT.

Command, *About,—Face!*

This is exactly like the right face except that a turn of 180 degrees is made in the first part.

(5) FACING TO THE LEFT.

Command, *To The Left,—Face!*

Turn to the left, pivoting on the left heel and pushing with the right toe.

(6) NUMBERING.

Command, *Count twos (or fours),—Start!*

This command is given only when the pupils are standing in line side by side. At the command, *count twos*, each pupil turns head slightly to the right, except the guide, who keeps eyes to the front; at the command, *Start!* the guide says, "*One,*" then the pupil at his left turns his head quickly to the front and says, "*Two,*" the next similarly says, "*Three,*" and so on until all have numbered. When the class is in two lines, the teacher instructs those in the rear line either to count in unison with the front line or to listen and get the number from the pupil in front as he calls it. The counting should be done in a clear tone, but not necessarily a loud one.



Fig. 32
Alignment sideward

(7) MARCHING STEPS.

Command, *One* (or two or three), *step forward*, (or b).—*March!*

The number of steps commanded are taken as in marching, beginning in all cases with the left foot and bringing in the foot beside the other in similar rhythm to complete the movement. It follows that one step will occupy two counts, two steps three counts, etc. The last count is accented as in facings.

(8) SIDE STEPS.

Command, *One Side Step to right*, (or left).—*March!*

The movement occupies two counts: the foot is placed to the side as in stride sideward on the first count, and the other foot is brought up beside it on the second. We sometimes command two side steps, but the second step is only a repetition of the first.

(9) OPENING AND CLOSING RANKS.

Command, *Open Ranks*.—*March!*

This command is given only when the class is in two lines, as in diagram (a); the lines separate by taking two steps away from each other, giving position (b). When the pupils are facing the end of the class, the steps are necessarily side steps; when one line is behind the other, the front rank step forward and the rear rank backward.

Return command, *Close Ranks*.—*March!*

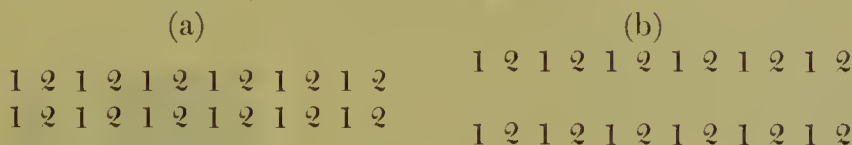


Fig. 33. Opening and closing ranks

(10) OPENING AND CLOSING SPACES.

Command, *Open spaces*.—*March!*

This command is given only when ranks are open or there is only one line, and must be preceded by numbering. The numbers one take one step in one direction and the numbers two take one step in the opposite direction. When the pupils face the end of the line the steps are necessarily side steps; when they stand side by side in the line the steps are necessarily forward and backward. It is customary to have the numbers one take the step forward or to the right and the numbers two to the left or back. This brings the class to the position shown in Fig. 34.

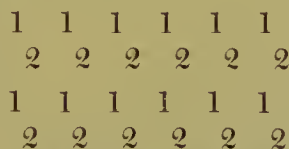


Fig. 34. In open order

Return command, *Close Spaces*.—*March!*

When taken directly after opening spaces, this movement is the reverse of the former; but since other exercises are usually taken in the open order, and the class may be facing in another direction when the time comes to close the spaces, it is best to think of returning to the line without regard to the numbers or the way the spaces were opened. For this reason we teach pupils to go by the number and its corresponding direction in opening spaces, but to ignore these and go in such direction as to close up in the reverse movement.

(11) OPENING AND CLOSING ORDER.

Command, *Open Order,—March!*

This exercise is simply a combination of the last two, meaning to open the ranks and then to immediately open the spaces, in even rhythm.

Return command, *Close Order,—March!*

(12) MARCHING.

Command, *Class Forward,—March! or Forward, quick time,—March!*

At the explanatory command the weight of the body is poised far forward; at the command,—*march!* pupils start promptly forward, beginning with the left foot, keeping even rhythm and all in unison, with trunk erect (not stiff) and arms hanging easily at the sides. For quick time 120 steps to the minute is the usual rate.

At the command, *Class,—Halt!* one more step is taken and the rear foot is placed beside the other on the next count, with an accent as in facing. Because of the momentum of the body and its inclination forward in marching it is almost impossible to stop instantly, which is the reason for the extra step after the command, "*Halt!*" To make the command, "*Class*" of any value as a warning signal it must be spoken on the step immediately preceding the word, *Halt!* instead of leaving a considerable pause between as we need to do in most commands. When it is desired to march slowly the command is *Forward, slow time,—March!*

(13) MARKING TIME. Fig. 35.

Command, *Mark Time,—March!*

This exercise is similar to marching and begins like it with the left foot; the



Fig. 35
Marking time

fect are raised directly upward by bending the hip and knee joints, keeping even rhythm and exact unison without advancing. *Class,—Halt!* is commanded and executed as in marching.

Faults: Rocking sidewise alternately as the foot is lifted.

(14) RUNNING.

Command, *Running Forward,—March!* or *Forward, Double Time,—March!*

At the command *forward* the weight is thrown on the right foot and the arms are bent at about a right angle, with the hands half closed and the elbows held slightly back; at the command,—*March!* the left foot is swung forward with the knee slightly bent and the weight thrown upon it by a spring from the right foot; then the right foot executes the same movement and it is continued in even rhythm, with the arms swinging easily at the sides of the chest.

At the command, *Class,—Halt!* three steps are taken to give time to check the momentum of the body, and the foot is brought in on the fourth count. If it is desired to change to marching time without stopping the command, *Quick Time,—March!* or *Slow Time,—March!*

(15) HOPPING EXERCISES.

Command, *Hopping on left (or r.) foot with free foot forward (or s or b),—Start!*

At the explanatory command raise the free foot in the direction given; at the command, *Start!* spring upward from the stationary foot and repeat in even rhythm, alighting each time on the same foot. At the command, *Class,—Halt!* stop the movement and bring the free foot beside the other on the next count. The manner of hopping may be varied by hopping two, four, or a large number of times on one foot and then changing to the other; the free foot may be swung in rhythm to the hopping; appropriate commands must be given.

(16) SKIPPING.

Command, *Skipping forward,—Start!*

Skipping consists in moving rapidly forward by hopping twice on one foot and twice on the other in succession, taking a full step in distance each time. Start with the left foot and stop as in running.

(17) MARCHING TO THE REAR.

Command, *To the Rear,—March!*

This is usually given while the pupils are marching, but may be given first from standing position to acquire the co-ordination.

At the command, *March!* which is given just as the right foot strikes the floor, (1) take one step with the left foot, placing it directly in front of the right foot; (2) lift the heels, with both feet on the floor,

and turn 180 degrees toward the right on the balls of the feet; (3) step forward with the left foot and continue marching in the opposite direction.

This is the first example of a command that must be spoken at a given time, and so requires special attention and practice by the teacher. The command, "*To the Rear*" should be spoken rapidly just as the left foot strikes the floor, the three words all in the time of the one step; the word, "*March*" is then spoken in unison with the stroke of the right foot. Advanced classes may be taught to take the movement at a command with a long pause, but beginners do best as stated above.

To teach the exercise it should be developed in the manner previously used for complex exercises, starting from the standing position.

Marching to right and to left are commanded in a similar manner. The execution differs in the following points: In marching to the right the foot is placed outward instead of in front of the other on the first count, and the turn is 90 degrees; marching to the left is commanded in the same way but two steps are taken, bringing the right foot forward; then the turn can be made to the left.

SUMMARY OF MISCELLANEOUS EXERCISES

ARM	{	Circumduction, (A cmd)
		Parting, (A pt)
		Rotation, (A ro)
		Breathing, (br)
CHANGE OF	{	Arms, (A ch)
		Feet, (F ch)
SWING OF		Foot, (Sw F)
CLOSING OPENING	OF {	Feet, (F cl and op)
		Preparation for jumping, (prep jp)
		Half kneeling, (1-2 kn)
		Kneeling, (kn)
JUMPING	{	Upward, (jp u)
		Forward, (jp f)
		Sideward, (jp s)

SUMMARY OF GYMNASTIC TACTICS

ALIGNMENT	{	Forward, (Al f)
		Sideward, (Al s)

FACING	{	To Right, (r f c)
		About, (ab fc)
		To Left, (l fe)
OPENING AND CLOSING	{	Numbering, (num)
		March Steps, (1 step f) (Two steps b)
		Side Steps, (1s step)
		Ranks, (op rks) (cl rks)
		Spaces, (op sp) (cl sp)
		Order, (op ord) (cl ord)
		Marching, (mch)
		Running, (run)
	{	Hopping Exercises, (hop)
		Skipping, (skip)
		Marching to the Rear, (mch rr)

COMBINATIONS OF GYMNASTIC MOVEMENTS

THEORY

Gymnastic movements are often combined, with the object of saving time and of varying the difficulty of the movements or their effect upon the body. The following are ways in which they are combined:

(1) One gymnastic position used as a preliminary position for taking another; as when trunk bending is done from a stride position or when arm circumduction is practiced while trunk is bent. In writing such combinations of exercises it is customary to write the preliminary position first, follow this by a comma, and then write the movement to be taken in that position; the above mentioned exercises would be written: std s, Tr bd f. Tr bd b, A cmd.

The preliminary position should be one that has been previously learned, and is taken only for the sake of the other position; the latter exercise, being new, is usually practiced several times. A period is used to separate independent exercises, and is not used excepting at the close of an exercise that is entirely independent of the one that follows it.

(2) Two or more movements executed at the same time, as when we take neck firm and stride position at once, or arm flinging upward while jumping. Only bendings and twistings of the trunk are not combined in this way. In writing combinations of this kind the abbreviations for the movements to be combined are written in succession with no marks of punctuation between them; the exercises mentioned above are written: Nf std s. jp u A fl u.

In speaking the commands for combination of this class it is necessary to avoid any pause until the whole explanatory command

is given, and then to make a pause much longer than usual before giving the signal for action. The reason is apparent. The commands for the two exercises just written are: *Neck firm and right foot side-ward,—Place! Hands and foot,—Replace! Jump upward and fling arms forward upward,—Start!* In each case the word “and” must be spoken so soon after the preceding as to make the class understand that the first part is not to be taken alone, and the tone and inflection should indicate the same thing. Teachers should practice speaking such commands until they acquire the correct manner of speaking them.

(3) Two or more movements taken in succession, usually in even rhythm; as when facings are followed by marching steps, or arm bending by arm stretching. Here the commands are spoken just as when the movements are to be taken together, and the same care has to be taken in speaking them. In writing such exercises, a dash is used to separate the different movements; for example, r fc—1 step f. A bd—A str f. H rse—K bd—K str—H sk.

(4) Exercises repeated in regular rhythm, after the manner in which the steps are repeated in marching and running. Exercises repeated in this way are said to be done “In series;” in writing them, they are printed in italics in the book and are underscored if in handwriting, as: A rse s. A bd. A str u.

The command for series work is the usual explanatory command for the exercise, followed by the phrase, *In series,—Start!* When the exercise gives rise to a sound in even rhythm, as in marching, this sound helps the class to keep in unison; when such a sound is lacking, the class should count in unison with the movements, to aid in keeping together, unless musical accompaniment is provided. It is much more effective for the class to count rather than the teacher, but counting is not enjoyed by pupils, and so should be avoided when another rhythm signal is present.

The use of punctuation marks to indicate the way exercises are to be taken may be summarized as follows:

Period: Indicates the close of an exercise. Exercises separated by a period are independent of each other; the first is completed and fundamental position is taken before taking the second.

Comma: Separates a preliminary position from the movement to be taken in that position; the exercise before the comma is commanded first, and the second is commanded while the first is being held.

Dash: Movements separated by a dash are commanded together and taken in succession in even rhythm.

CHAPTER VI

PROGRESSION IN SWEDISH GYMNASTICS—THEORY

The Swedish system emphasizes the importance of careful progression in gymnastics and recognizes two forms of it: one kind of progression within each lesson, and another from lesson to lesson. Progression within the lesson is provided for in the plan of lesson known as the Day's Order.

THE DAY'S ORDER.—Several principles stated in an earlier section (see page 13) are put into practice here. The Day's Order is designed for use in the school room, where the pupils go from various occupations directly to gymnastics, and when this is over return at once to their school tasks. The lesson is divided first into three parts and these are subdivided, making in all eleven groups of exercises that are provided for in each lesson.

The Day's Order	Preparatory.	I.—	Order Movements.
		II.—	Leg Movements.
	Body of Lesson.	III.—	Arch Flexions.
		IV.—	Heave Movements.
		V.—	Balance Movements.
		VI.—	Back Exercises.
		VII.—	Abdominal Exercises.
		VIII.—	Lateral Trunk Movements.
		IX.—	The Climax; Running and Jumping.
	Quieting.	X.—	Slow Leg Movements.
		XI.—	Breathing Exercises.

The first two groups (called preparatory above) aim to prepare the class for what is to follow. The next seven groups form the lesson proper, and gradually increase in muscular requirement as far as the ninth, after which the work decreases. This idea of the rise and fall in the amount of muscular work is essential to the Swedish plan of lesson, and must be kept in mind both in making lesson plans and in teaching.

GENERAL PRINCIPLES OF PROGRESSION

In progression from lesson to lesson the rule of advancing from the simple to the complex, which is the chief guide to progression in

all teaching, is followed with a few exceptions. The most notable single exception is that of Fundamental Standing Position, which is always given (unless with primary pupils) at the very first, although it is much more difficult and complex than many other exercises. The conditions under which gymnastic work is done sometimes compel the teacher to teach certain complex exercises early in the course, as when the use of a floor without marks necessitates the teaching of some form of opening order; when marching is to be done in class, it is sometimes best to teach marching to the rear early, to save time otherwise used in halting, facing, and starting again. Most of all, the physiological purpose of certain groups of exercises calls for a different sequence than that we would give if ease of acquirement were the only basis of progression. For example, running is simpler and much easier for the pupils to learn than heel raising in series with change of feet, or preparation for jumping with arm movements; but in group II, where these exercises belong, the sequence depends chiefly on the effectiveness of exercises for "Warming Up," and hence running is more advanced than the other two.

In solving problems in gymnastic progression it is also important to remember that learning a gymnastic movement involves not only the getting of a clear idea, which is all there is in learning most things, but also the perfecting of a coördination; it follows that the exercise that bears the closest general resemblance to a previous exercise is not always the one that will be the most easily performed after it. For example, a pupil who has learned to execute right face will acquire about face next in order much more easily than left face, because the about face not only involves the same kind of movement but employs the same muscles in the same way as the former exercise, while the left face requires him to do with the muscles of the opposite side of the body an exercise that he has learned to do only toward the right.

THEORY OF THE ELEVEN GROUPS

GROUP I: ORDER MOVEMENTS

Pupils going directly to gymnastic practice from other school activities are not apt to be in the best possible mental condition for entering into it promptly. These exercises aim to attract the attention of the pupils from what they have been doing and to turn it toward muscular control. To be good for this purpose, exercises must be quick, with a definite start and finish, so that the teacher can require accuracy of both form and rhythm; they must be given by command, since exercises in series soon become reflex and so permit the

attention to wander ; standing at the beginning of the lesson, they should require but little muscular effort. Facings, simple arm and foot positions, and opening order, are good examples of Order Movements. Since attention is especially required in learning new exercises, we may reasonably call any new movement an Order Movement while it is being learned, unless it plainly falls in some other group of the Day's Order.

There should be a progression from the simple to complex in the order movements of each lesson, as well as from one lesson to the next, because ability to concentrate the attention and to coördinate new exercises increases rapidly as the first few attempts are made at the beginning of the gymnastic period. If the Order Movements are too difficult at first, a feeling of discouragement is produced in the class. This matter can usually be provided for in the management of the class without planning for it in the making of the lesson plans.

GROUP II. LEG MOVEMENTS

These exercises are intended to give the general effect known as "warming up," which includes a slight rise in the temperature of the body, moderate increase in the heart action and breathing, and the sending of more blood to the muscles. The heat that causes the warming up arises from the chemical action in the muscles that takes place during muscular exercise. Since we wish a large amount of this chemical change without much fatigue, we choose exercises that employ the largest muscles in the body rather than the smaller ones. Marching, heel raising, running, and other movements where the lower limbs lift the entire body make the best movements for this group.

The sequence of leg movements depends first upon their effectiveness for warming up; when several exercises are about alike in this respect sequence among them is determined by the law of "simple to complex." In deciding which of two exercises will warm one up most rapidly, we can judge by the distance the body is lifted in each movement, since the amount of exertion and of chemical change is nearly proportional to the height through which the pupil lifts his body. The speed of the exercise and the number of times that it is repeated also are important, but these are managed by the teacher in conducting the work rather than in the selection of the exercises.

It is found as a matter of experience that exercises given by separate commands are too slow to serve well for the present purpose, and so leg movements are always given in series when it is possible.

GROUP III. ARCH FLEXIONS

These are backward bendings of the neck and upper portion of the spinal column, taken with the object of correcting round shoulders. This fault of posture, so common among school children and students, always flattens the upper part of the chest and lessens the range of the breathing movements, and so diminishes the capacity of the lungs. The alarming prevalence of fatal lung diseases, like pneumonia and consumption, points to the importance of keeping the chest in good condition. By the practice of arch flexions the muscles supporting the chest are developed, and also those that hold the spinal column erect; the tissues across the front of the chest and shoulders are stretched at the same time, making it gradually easier for the person to hold the normal posture and to breathe deeply.

The Swedish system contains but two exercises that are distinctly arch flexions: head backward and trunk backward; and these are very similar, the latter being the more advanced. To afford variety we give these two movements in combinations with various foot and arm positions; these are arranged so as to progress from the easier to the more difficult. Head backward is first given, if possible, while pupils sit in the school seats, with a back to the seat that can afford a support. (Fig. 36.) From this the sequence follows a series of positions gradually increasing in difficulty; then trunk backward is given, either in the seats at first or with support by pupils. Arch flexions may be accompanied to advantage with breathing exercises.

GROUP IV. HEAVE MOVEMENTS



Fig. 36
Head backward while sitting

Heave movements are movements of the arms that help to expand the chest. The typical heave movements, sometimes called "the true heave movements," are those in which the body is suspended by the arms as in climbing, swinging on rings, etc. Large muscles passing from the chest to the upper arm are used in these movements, exerting an upward pull on the ribs and thus enlarging the chest. Since these "suspension" exercises are too severe for some pupils, and as the necessary apparatus is not always provided, milder arm movements having a similar effect are used. Arm raising, arm stretching, neck firm, etc., are examples.

Progression in heave movements should be such as to give a gradually increasing pull upward on the ribs; when exercises are of equal force in this respect, they are arranged in the order of their

complexity, and the effect on chest expansion is made to increase from lesson to lesson by having the exercises taken more and more times.

GROUP V. BALANCE MOVEMENTS

These are for general improvement of posture and cultivation of ability to maintain the balance under difficulties. The exercises are mainly standing positions that give an unstable poise, held for a much longer time than positions taken for other purposes; marching on a narrow beam or wire and taking other exercises on them are also used. (Fig. 37.)

Balance movements are arranged in the order of the difficulty of keeping the balance; this difficulty increases, (1) as the base of support is narrowed, as in standing on one foot instead of two, (2) when an unfamiliar position is assumed, as in standing with knees bent to a right angle, (3) when parts of the body are moved while the balance is being held, and (4) as fatigue increases.



Fig. 37
Walking the beam

GROUP VI. BACK EXERCISES

In order to cultivate control of the posture of the trunk and to develop and train the back muscles to hold the trunk properly, we use positions in which the trunk inclines so as to throw the weight of the upper part of the body on the back muscles. This is accomplished when we incline the trunk forward while supported from below, as in fallout forward or trunk forward, or when we incline it backward while it is supported at both extremities, as in leaning hang.

In standing position we have as back exercises inclining forward, downward bending of the trunk, and the forward and the outward fallouts. These four exercises throw about equal strain on the back muscles, so that the progression from lesson to lesson is wholly advancement from simple to complex,—excepting that in the use of combinations with arm positions, those arm positions in which the arms are held highest add to the strain on the back muscles in proportion to the height at which they are held. The fallout positions are more complex than the forward bendings, but a simple fallout

may be less difficult than a complex bending with the arms held high; the most difficult of all is the combination in which we incline trunk forward from fallout as a starting position.

GROUP VII. ABDOMINAL EXERCISES

The purpose of abdominal exercises is to cultivate the ability to maintain good posture of the trunk, to strengthen the abdominal muscles, and to stimulate the digestive organs. The trunk is held in normal position in all of these exercises, which aids in promoting good postures; every contraction of the abdominal muscles presses upon the stomach, liver and other organs in the abdominal cavity, and thus stimulates their activity directly, and also indirectly by the influence of the alternations of pressure on the circulation of blood in them. Occupations of civilized life provide exercise for the abdominal muscles less than for any other important group, and the resulting weakness of these muscles leads to bad posture, displacement of the internal organs, and disease.

The weight of the upper part of the body is thrown on the abdominal muscles and this gives them exercise when we incline backward from stride position forward (See figure 10), from sitting position (Fig. 11), from half kneeling position, or from kneeling position; the weight of the middle of the body is thrown upon them when we incline forward with the body supported by the hands and feet, as in leaning position. (See Fig. 7.) In all cases the strain on the abdominal muscles increases as we incline farther from the vertical and approach the horizontal position; arm positions can be used in the exercises in which we incline backward, and they make the strain greater as the arms are raised, with the exception of the forward position of the arms, which has little effect until we approach near to the horizontal position. In a gymnasium with plenty of suitable apparatus abdominal exercises can be taken by raising the knees while hanging by the hands, but this is in some cases too severe work for the arms. Another form of abdominal exercise is taken while lying on the back, the feet or the head and shoulders being lifted by the contraction of these muscles; this is a useful and popular home exercise, but not satisfactory for class use, excepting in a gymnasium with advanced classes.

GROUP VIII. LATERAL TRUNK EXERCISES

These are movements in which we bend the trunk laterally, twist it, or incline it sideward, for the purpose of increasing the mobility of the spinal column, improving the posture of the trunk,

and stimulating the abdominal organs. The principles of progression by which the exercises of the last two groups are arranged in sequence apply here.

A peculiarity should be noticed in the use of the stride sideward as a starting point for side bendings. It is the easiest position for beginning to learn side bendings, since it gives a wide base of support; as skill improves, the pupil can progress to side bendings from the fundamental position; but when we introduce arm positions with the arms held high, as in arms upward, we need to go to the wide base again to keep the balance, or the extent of the movement will be restricted. It should be noticed also that the stride forward helps the pupil to avoid twisting the hips when twisting the trunk toward the forward foot, and increases his tendency to do this when he twists away from it.

GROUP IX. RUNNING AND JUMPING

This is the climax of the lesson. The work should be the strongest and most difficult of all. Games, when the space permits, are useful here; running, jumping, and the more vigorous fancy steps are the exercises most used. Grade pupils often suffer from lack of exercise of this kind, which they thoroughly enjoy and profit from, but which teachers are apt to neglect because it leads to some disorder and noise. When the time given to gymnastics is short and the work done in the grade room, it is often best to attempt little more than posture work in Swedish gymnastics, and plan to provide the more vigorous exercises at other times in the form of plays and games.

GROUP X. SLOW LEG MOVEMENTS

When a true climax has been reached and the pupils are considerably warmed up, it is necessary to choose exercises that will serve as a gradual descent from the preceding group, so as to avoid the undesirable effects of stopping too suddenly. The exercises usually chosen are like those of group two, but gradually decreasing in vigor. Marching is the most satisfactory exercise of this group.

GROUP XI. BREATHING EXERCISES

The object of this group is to continue the quieting effects of the tenth group and at the same time to improve the development and control of the breathing muscles and increase the mobility of the chest. Slow and deep inhaling and exhaling of the breath are used as the exercises. It was formerly customary to take arm movements with the breathing, on the supposition that they aid in chest expansion, but it has been found out that the deepest breathing can be done with the arms hanging easily at the sides.

CHAPTER VII

PROGRESSION IN SWEDISH GYMNASTICS—PRACTICE

Practice for the student here consists in the study of the following progressive lists to find why the order of sequence should be as given, and in practice in commanding, demonstrating, or developing such of the combinations as involve any difficulty for the teacher. In the teaching of these exercises care must be taken to conduct them in such ways as to secure the effect the group is intended to give. For example, order movements should be conducted in the manner best calculated to secure attention; leg movements so as to produce "warming up;" balance movements, ability to poise under difficulties; trunk movements, careful coördination of the trunk muscles, etc.

PROGRESSIVE LISTS

The exercises of the following lists are arranged first in the various groups of the Swedish Day's Order, and within these groups in progressive sequence.

I. ORDER MOVEMENTS

- | | |
|--------------------------|---|
| (a) pos. | (m) L fc. |
| (b) Hf. | (n) Num. |
| (c) Std s. | (o) Op rk. |
| (d) Std f. | (p) Op sp. |
| (e) Std f, ch F. | (q) Op ord. |
| (f) 1 step f or b. | (r) Mch rear. |
| (g) 2 or 3 steps f or b. | (s) R fc—1 step f. |
| (h) Std s, ch F. | <i>Right face and one step forward,—March!</i> |
| (i) 1 step s. | (There are 36 possible combinations of this type.) |
| (j) Al f. | |
| (k) R fc. | |
| (l) Ab fc. | |
| (t) R fc—1 step f—r fc. | <i>Right face one step forward and right,—face!</i> See directions for commanding complex exercises, page 44. (There are 198 possible combinations of this type). |

II. LEG MOVEMENTS

1. Marching Movements.

(a) Marking time.

(b) Marching.

2. Heel raising rapidly in series from several preliminary positions as follows:

(c) Hf, H rse. *Hips,—Firm! Heel raising in series with counting,—Start! Class,—Halt!*

(d) Hf std s, H rse.

(e) Hf std f, H rse.

(f) Nf std s, H rse. Nf std f, H rse.

(g) A bd std s, H rse. A bd std f, H rse.

3. Heel raising and an arm movement together in series.

(h) A s H rse. Std s, A s H rse. Std f, A s H rse. Command, *Arm raising sideward and heel raising in series with counting,—Start! Class,—Halt! Right foot sideward,—Place! In series as before,—Start! etc.*

(i) A f H rse. Std s, A f H rse. Std f, A f H rse.

(j) Nf H rse. Std s, etc.

(k) A bd H rse, etc.

(l) A u H rse. Command, *Arm raising forward upward and heel raising in series with counting,—Start!*

4. Heel raising in series with change of feet.

(m) Hf std s, H rse 3 times—*ch F*. Command, *Hips firm and right foot sideward,—Place! Heel raising three times, then change feet and repeat in series,—Start!*(n) Hf std f, H rse three times—*ch F*.(o) Nf std s, H rse three times—*ch F*. Nf std f, H rse, etc.(p) A bd std s, H rse three times—*ch F*. A bd std f, etc.

5. Preparation for jumping, several preliminary positions.

(q) Hf, prep jp. Nf, prep jp. A bd, prep jp. Command, *Hips,—Firm! Preparation for jumping in series with counting,—Start! etc.*

(r) Hf std s, prep jp. Nf std s, etc.

(s) Hf std f, prep jp, etc.

6. Preparation for jumping combined with arm movements.

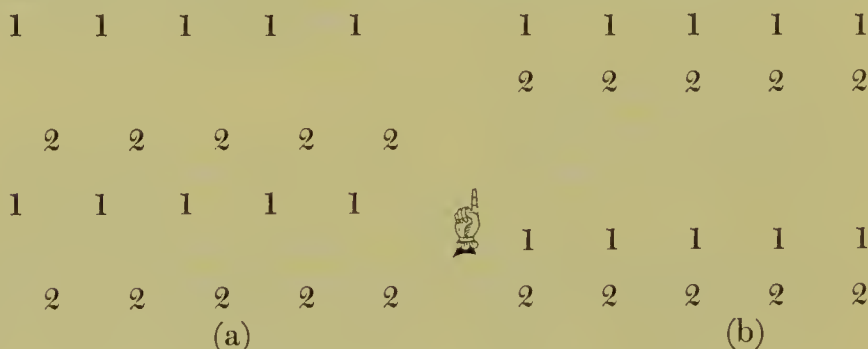
(t) A f H rse—A s K bd—A f K str—*pos*. Command, *Arms forward and heels,—Raise! Swing arms sideward and knees,—Bend! Swing arms forward and knees,—Stretch! Arms and heels,—Sink! The same exercise by the numbers,—One! Two! Three! Four! The same in series, with counting,—Start! etc.*

- (u) *A s H rsc—A u K bd—A s K str—pos.*
 (v) *A bd H rsc—A str s (f, u, or d) K bd—A bd K str—pos.*
 7. Running movements.
 (w) Running in place.
 (x) Hopping exercises.
 (y) Running.

III. ARCH FLEXIONS

1. Head bending backward with support by back of school seat.
 (a) Sit, H b. Sit, Hf, H b. Command, *In position,—Sit! Head backward,—Bend! Head upward,—Stretch!* etc. (Fig. 37.)
 2. Head bending backward from preliminary standing positions.
 (b) Hf std f, H b. A s std f, H b. A f std f, H b. A bd, etc.
 (c) Hf std s, H b. A s std s, H b. A f std s, H b. A bd, etc.
 (d) Hf, H b. A s, H b. A f, H b. A bd, H b.
 (e) Nf std f, H b. Nf std s, H b. Nf, H b.
 3. Holding head backward while taking arm movements.
 (f) Std f, H b, Hf. Std f, H b, A s, Std f, H b, A f. Std f, H b, A bd. Std f, H b, Nf. Command, *Right foot forward,—Place! Head backward,—Bend! Hips,—Firm! Hands,—Down!* (Repeat the arm movement several times.) *Head upward,—Stretch! Foot Replace! Rest!*
 (g) Std s, H b, Hf. Use in this way the other arm movements of (f).
 (h) H b, Hf. Use in this way the other arm movements of (f).
 4. Trunk bending backward with support by pupils.

To bring pupils to positions for supporting one another, first bring them to open order, (exercise 11 of tactics, page 50) as shown in diagram (a), fig. 38. Then command, *Numbers one, one side*



(Class facing in direction of hand)

Fig. 38. Arrangement of class for support.

step to right, numbers two, one step forward,—March! This shifts pupils from formation (a) to formation (b) and the following can be given:

- (i) Hf std f sup, Tr b. Use also the other arm positions of (f).
Command, *Numbers one, Hips firm and right foot forward, numbers two, right foot forward and right hand for support,—Place! Numbers one, Trunk backward,—Bend! Trunk,—Raise!* etc. By facing about, the numbers one are placed in position for supporting the numbers two.
 - (j) Hf std s, sup, Tr b. Use also the other arm positions.
 - (k) Hf sup, Tr b. Use also the other arm positions.
 - (l) Sup, Tr b, Hf. Use also the other arm movements as in (f).
 - (m) A bd std f sup, Tr b, A str s. Stretch the arms also f, u, and d instead of s.
5. Trunk bending backward without support.
- (n) Hf std f, Tr b. Nf std f, Tr b. Take same from std s and afterwards from fundamental position.
 - (o) Std f, Tr b, A cmd.

IV. HEAVE MOVEMENTS

1. Simple arm movements.

- (a) A s. (rse and fl)
- (b) A f. (rse and fl)
- (c) Nf.
- (d) A bd.
- (e) A u. (rse and fl)

2. Arm stretching from bent position.

- (f) A bd, A str s. A bd, A str s. A bd, A str s std s. Command, *Arms,—Bend! Arms sideward,—Stretch! Arms,—Bend!* (Repeat for practice and criticism.) *Arms sideward in series with counting,—Stretch! Halt! Arm stretching sideward and placing right foot sideward in series,—Start!* (The foot placing is added to give a sound to take the place of the counting for rhythm.)

- (g) A bd, A str f. A bd, A str f std f.



Fig. 39
Support

- (h) A bd, A str d. A bd, A str d std f.
- (i) A bd, A str u. A bd, A str u std f.
- 3. Arm bending and stretching from fundamental position.
 - (j) A bd—A str s. A bd—str s std s. A bd—A str s std s. *Arms bend and then sideward,—Stretch! Arms bend and then downward,—Stretch! Arms bend and then stretch sideward with foot placing sideward,—Stretch! Bend arms and replace foot and then downward,—Stretch! The same in series,—Start! Halt! Later the command for the bending is omitted, pupils being told that the command, "Stretch" always implies a bending first. Arms sideward,—Stretch! Arms downward,—Stretch!*
 - (k), (l), and (m), Stretch arms f, u, and d in manner of (j).
- 4. Two or more arm stretchings at one command.
 - (n) A str s—A str f. A str f—A str u—A str s. *Arms sideward and then forward,—Stretch! This involves four counts: (1) A bd—(2) A str s—(3) A bd—(4) A str f. Arms forward, upward, and sideward,—Stretch! This involves six counts.*
- 5. Climbing exercises on ladders.
- 6. Hanging position, with arm bending exercises.
- 7. Ring and bar exercises.

V. BALANCE MOVEMENTS

- 1. Heel raising.
 - (a) Hf, H rse. A s H rse. Nf, H rse. A bd, H rse.
 - (b) Hf std s, H rse. Nf std s, H rse, etc.
 - (c) Hf std f, H rse. Nf std f, H rse, etc.
 - (d) H rse, Hf, Nf, A s, etc. *Heels,—Raise! Hips,—Firm! Neck,—Firm! Arms sideward,—Fling! Arms and Heels,—Sink!*
- 2. Leg raising. (Should be taken r and l in alternation.)
 - (e) Hf, L rse s. A s L rse s. Nf, L rse s. A bd, L rse s.
 - (f) Hf, L rse f. A s L rse f, etc.
 - (g) Hf, L rse b, etc.
 - (h) L rse s, Hf, Nf, A s, etc. L rse f, Hf, Nf, etc.
 - (i) Nf L rse s, sw F f, s, and b, etc.
 - (j) L rse s, bd K of supporting leg. *Right leg sideward,—Raise! Left knee,—Bend! etc.*
- 3. Knee bendings.
 - (k) Hf H rse, K bd. Hf std s, K bd. Hf std f, K bd. Use also other arm positions than Hf.

4. Knee Raising, (Should be taken r and l in alternation.)
 - (l) Hf, K rse. A s K rse. Nf, K rse. A bd, K rse.
 - (m) Hf K rse, K str f. Hf K rse, K str s. Hf K rse, K str b.
 - Use also other arm positions.
 - (n) K rse, Hf, Nf, A s, etc.
5. Marching on balance beams.
6. Poising on toes of one foot. (R and l alternately.)
 - (o) Hf L rse s, rse heel of supporting foot. Hf L rse f, etc.
 - (p) Hf L rse s, turn 90 degrees r or l. Hf L rse f, etc.

VI. BACK EXERCISES

1. Trunk forward and downward with easy arm positions.
 - (a) Hf std s, Tr incl f. A f std s, Tr incl f. Use also A bd and Nf as arm positions.
 - (b) Std s, Tr incl f, Hf, A f, A bd, etc.
 - (c) Hf std s, Tr bd d. A f std s, Tr bd d, etc.
 - (d) Std s, Tr bd d, Hf, A bd, Nf, etc.
2. Fallout forward.
 - (e) Hf, fal f. A s, fal f. Use also A f, A bd, and Nf.
 - (f) Hf fal f. A s fal f, etc.
 - (g) Fal f, Hf, A s, Nf, etc.
3. Fallout outward.
 - (h) Arm positions preliminary, as in (e).
 - (i) Arm positions at same time, as in (f).
 - (j) Arm movements while holding the fallout, as in (g).
4. Fallout with arms upward.
 - (k) A u, fal f. A bd fal f, A str u. A bd, fal f A str u. A u fal f.
 - (l) Same as (k) with fallout outward.
5. Trunk forward and downward with arms upward.
 - (m) A u std s, Tr incl f. A bd std s, Tr incl f, A str u. Std s, Tr incl f, A u.
 - (n) Same as (m) with trunk bending downward.
6. Fallout forward as preliminary for inclining forward.
 - (o) Hf fal f, Tr incl f. A bd fal f, Tr incl f. Use also Nf.
 - (p) A u fal f, Tr incl f. A bd fal f, Tr incl f, A str u.

VII. ABDOMINAL EXERCISES

- (a) Leaning position with hands on desks; bd and str arms.
- (b) Hf std f, incl b. A f std f, incl b. A bd std f, incl b.

- (c) Leaning position with hands on seats; bd and str arms.
- (d) Same as (b) with step gradually lengthened.
- (e) Same as (d) with Nf.
- (f) Sit, F sup, incl b 30 degrees with arm positions as in (b).
- (g) " " " " 45 " " " " " "
- (h) Half kneeling incline backward " " " " "
- (i) Kneeling, " " " " " "
- (j) Leaning position with hands on floor.
- (k) Hanging position, raise knees.
- (l) Lying on back, raise feet.
- (m) Lying on back, rise to sitting position.

VIII. LATERAL TRUNK EXERCISES

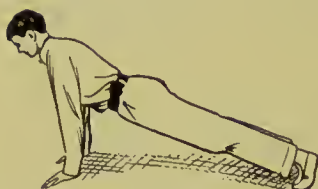


Fig. 40
Leaning position, hands
on floor

- (a) Std s, Tr bd s. A s std s, Tr bd s.
A f std s, Tr bd s. Use also A bd
and Nf.
- (b) Same as (a) from fundamental position instead of std s.
- (c) Same as (a) from stride forward instead of std s.
- (d) Std f, Tr tw (toward forward foot).

Use also A f, A bd, and Nf as arm positions.

- (e) Same as (d) from std s.
- (f) Hf, fal s. A f, fal s. Use also A bd and Nf as arm positions.
- (g) Same as (f) but take arm positions with fal s.
- (h) Swaying from fal s r to fal s l, with change of arm positions.
- (i) Fal s, Tr bd s. (fal and bd in same direction.) Arm positions as in (a).
- (j) Nf std s, Tr tw, Tr bd s. Nf std s, Tr tw, Tr bd s.
- (k) A u std s, Tr bd s. A u fal s, Tr bd s.

IX. RUNNING AND JUMPING

- (a) Marching, quick time.
- (b) Running.
- (c) Skipping and hopping exercises.
- (d) Upward jump. Jp u A fl f-u.
- (e) Jp u turn 90 degrees. Jp u turn 180. Jp u turn 270.
- (f) Jp f fl A f.
- (g) Jp s A fl s.
- (h) Jp f with one running step.
- (i) Same as (h) with 2 to 4 running steps.
- (j) Jp f with running steps and turn 90 degrees.

(k) Jp s with a step as a start.

(l) Same as (k) with a turn of 90 or 180 degrees.

(m) Running high jump. Like (j) but higher.

In all running jumps with a turn, the turn is toward the foot from which the jump is made.

X. SLOW LEG MOVEMENTS

Any exercise of group II may be used here, and the sequence is the same. Marching with gradually decreasing rhythm is the most satisfactory of all slow leg movements.

XI. BREATHING EXERCISES

No progressive list of breathing exercises can be given. The progression is in the manner of taking the exercise rather than in its outward form. Arm movements do not aid, as was formerly supposed.

CHAPTER VIII

LESSONS IN SWEDISH GYMNASTICS—THEORY

To plan a series of lessons in Swedish gymnastics we proceed as follows:

1. For the first lesson, take the first exercises of each progressive list, adding marching and breathing for groups X and XI. If the pupils have had Swedish gymnastics before, this will work satisfactorily; if all of the exercises are wholly new to them, it will be necessary to omit two or three groups from the first lesson and one or two from the second, because new exercises require so much time.

2. For the succeeding lessons take the exercises coming next in order in the progressive lists, bearing in mind differences in the time required to master different exercises. Some exercises may need to be repeated for several days; others are so easy that two of the same group may be taken the same day. This will depend also on the time allowed for the gymnastic lesson; the practice of eleven groups of exercises in ten or fifteen minutes does not give much time to any one group.

3. Make sure that no movement is used in combination until it has been taught alone; this applies especially to preliminary arm and foot positions.

4. Take pains to indicate by punctuation marks exactly how the combinations are to be given. Pay special attention to the use of the comma and the period, as the usual habit of placing a period after an abbreviation is apt to cause trouble.

The following set of lesson plans is given for illustration of how to do this, and for practice in teaching.

A SERIES OF SIX LESSONS SUITABLE FOR PRIMARY GRADES, PUPILS HAVING HAD NO PREVIOUS TRAINING

LESSON 1.	LESSON 2.	LESSON 3.
I. Pos. std s.	I. Std f. Hf.	I. Std f, ch F.
II. M t.	II. M t.	II. M t.
III.	III.	III.
IV. A s rse.	IV. A s rse.	IV. A s fl.
V. H rse.	V. Hf, H rse.	V. Hf, H rse.

LESSON 1—Continued	LESSON 2—Continued	LESSON 3—Continued
VI.	VI.	VI. Hf, std s, Tr incl
VII.	VII.	f.
VIII.	VIII. Std s, Tr bd s.	VII.
IX. Skip.	IX. Run.	VIII.
X. Mch.	X. Mch.	IX. Skip.
		X. Mch.

LESSON 4.	LESSON 5.	LESSON 6.
I. 1 step f.	I. 1 step b.	I. 2 steps f.
II. Mch.	II. Mch.	II. Mch.
III.	III.	III.
IV. A f rse.	IV. A f rse.	IV. A f fl.
V. Std s, H rse.	V. Hf, std s, H rse.	V. A s rse H rse.
VI.	VI. Hf, std s, Tr incl	VI.
VII.	f.	VII.
VIII. Std s, Tr bd s.	VII.	VIII. A s fl, std s, Tr
IX. Run.	VIII.	bd s.
X. Mch.	IX. Skip.	IX. Run.
	X. Mch.	X. Mch.

NOTE: Trunk exercises being less necessary than for older pupils, Groups III and VII are omitted entirely, and VI and VIII used on alternate days. Group XI is also omitted.

A SERIES OF SIX LESSONS SUITABLE FOR BOYS OF GRAMMAR GRADE
WHO HAVE HAD SOME TRAINING, WORKING IN THE AISLES BETWEEN
THE DESKS AND SEATS

LESSON 1.	LESSON 2.	LESSON 3.
I. Pos. Hf. Std s.	I. Std f.	I. Std f, ch F.
II. M t.	II. Mch.	II. Mch.
III. Sit, Hf, H bd b.	III. Sit, Hf, H bd b.	III. Sit, Hf, H bd b.
IV. A rse s. A fl s.	IV. A rse f. A fl f.	IV. Nf.
V. Hf, H rse. Hf H	V. A rse s H rse.	V. A rse f H rse.
rse.	VI.	VI.
VI. Hf std s, Tr	VII. Sit, F sup, Hf, VII.	VIII. Std s, Tr bd s.
incl f.	incl b.	IX. Run.
VII.	VIII.	X. Mch.
VIII.	IX. Mch.	XI.
IX. Mch.	X. Mch.	
X. Mch.	XI.	
XI.		

LESSON 4.	LESSON 5.	LESSON 6.
I. 1stepf. 1stepb.	I. 2 steps f or b.	I. 3 steps f or b.
II. Mch.	II. Mch.	II. Mch.
III. Sit, A f, H bd b.	III. Sit, A f, H bd b.	III. Sit, A f, H bd b.
IV. Nf.	IV. A bd.	IV. A bd.
V. A f fl H rse.	V. Nf, H rse.	V. A bd, H rse.
VI. Hf std s, Tr incl f.	VI. Sit, Hf, F sup, Tr incl b.	VI. A s std s, Tr bd s.
VII.	VIII.	VIII.
VIII.	IX. Run, Jp u.	IX. Run. Jp u.
IX. Run.	X. Mch.	X. Mch.
X. Mch.	XI. Br.	XI. Br.
XI. Br.		

A SERIES OF SIX LESSONS SUITABLE FOR HIGH SCHOOL GIRLS WHO
HAVE HAD NO PREVIOUS TRAINING, WORKING IN AN OPEN HALL

LESSON 1.	LESSON 2	LESSON 3.
I. Pos. Hf. Std s.	I. Std f.	I. Std f, ch F.
II. M t.	II. M t.	II. Mch.
III.	III.	III. Std f Hf, Hbdb.
IV. A rse s.	IV. A fl s.	IV. A rse f.
V. Hf, H rse.	V. Hf, H rse.	V. A s rse H rse.
VI.	VI. Hf std s, Tr incl f.	VI. Hf std s, Tr incl b.
VII.	VII. Hf std s, Tr incl b.	VII. Hf std f, incl b.
VIII. Std s, Tr bd s.	VIII. A fl s std s, Tr bd s.	VIII. A fl s std s, Tr bd s.
IX. Mch.	IX. Mch.	IX. Mch.
X. Mch.	X. Mch.	X. Mch.
XI. Br.	XI. Br.	XI. Br.

LESSON 4.			LESSON 5.			LESSON 6.		
I.	1 step f.	1 step b.	I.	2 steps f.	2 steps b.	I.	3 steps.	
II.	Mch.					II.	Mch.	
III.	Hf std f,	H bdb.	II.	Mch.		III.	A fl s std f,	H
IV.	A fl f.		III.	A fl s std f,	H		bd b.	
V.	H rse, A fl s,	Hf,		bd b.		IV.	Nf.	
	etc.		IV.	Nf.		V.	H rse, A fl f,	
VI.	A fl f std s,	Tr	V.	A fl f, H rse.			Hf, etc.	
	incl f.		VI.	A fl f std s,	Tr	VI.	Std s, Tr incl f,	
VII.	Hf std f,	incl b.		incl f.			A fl s, A fl f.	
VIII.	A fl s std s,	Tr	VII.	Hf std f,	incl b.	VII.	A fl f std f,	incl b.
	bd s.		VIII.	A fl f std s,	Tr	VIII.	Nf std s,	Tr bd
IX.	Mch.			bd s.			s.	
X.	Mch.		IX.	Mch.		IX.	Mch.	
XI.	Br.		X.	Mch.		X.	Mch.	
			XI.	Br.		XI.	Br.	

A SERIES OF SIX LESSONS SUITABLE FOR HIGH SCHOOL BOYS WHO
HAVE GYMNASTIC TRAINING AND WHO WORK IN A GYMNASIUM

LESSON 1.			LESSON 2.			LESSON 3.		
I.	Pos.	Hf. std s.	I.	Std f, ch F.	1	I.	2 or 3 steps.	
II.	M t.	Mch.		step f.		II.	Nf std s, H rse.	
III.	Hf std f,	H bd	II.	H rse. Std s,	H	III.	A bd std f,	H b.
	b.			rse.		IV.	A rse u.	A fl u.
IV.	A fl s.	A fl f.	III.	A f std f,	H bd	V.	Hf L rse (f,s,b).	
V.	H rse,	A f, A s.		b.		VI.	Std f, Tr f,	Hf,
VI.	Hf std f,	Tr incl	IV.	Nf. A bd.			Nf.	
	f.		V.	H rse, Hf,	Nf.	VII.	Ln. (hands on	
VII.	Hf std f,	incl b.	VI.	A f std s,	Tr		floor).	
VIII.	Std s,	Tr bd s.		incl f.		VIII.	Nf std s,	Tr bd
IX.	Mch.		VII.	A f std f,	incl b.		s.	
X.	Mch.		VIII.	A f std s,	Tr	IX.	Run. Jp u.	
XI.	Br.			bd s.		X.	Mch.	
			IX.	Run.		XI.	Br.	
			X.	Mch.				
			XI.	Br.				

LESSON 4.		LESSON 5.		LESSON 6.	
I.	Stds, chF. 1sst.	I.	Al f. R fe.	I.	Ab fe. L fe.
II.	Hf std f, <i>H rse.</i>	II.	Nf std f, <i>H rse.</i>	II.	A bd stdf, <i>H rse</i>
III.	Hf std s, H b bd.	III.	A f std s, H bd b.	III.	A bd std s, Hbd b.
IV.	A bd, <i>A str s std</i> <i>s.</i>	IV.	A bd, <i>A str f std</i> <i>f.</i>	IV.	A bd, <i>A str d</i> <i>std f.</i>
V.	Nf L rse b.	V.	L rse, Hf, Nf, etc.	V.	Nf L rse, F sw.
VI.	Hf fal f. A f fal f.	VI.	A s fal f. Nf fal f.	VI.	Fal f, Hf, Nf.
VII.	Ln. (hds on fl).	VII.	Ln. (hds on fl).	VII.	Hg, K rse.
VIII.	Nf, Tr bd s.	VIII.	Nf std f, Tr bd s.	VIII.	A f std f, Tr tw.
IX.	Run. Jp u F f—u. fl	IX.	Jp u turn 90 deg.	IX.	Jp u turn 180.
X.	Mch.	X.	Mch.	X.	Mch.
XI.	Br.	XI.	Br.	XI.	Br.

LESSONS IN SWEDISH GYMNASTICS—PRACTICE

1. Prepare to teach any of the lessons just given to a group of fellow students. In this teaching the purpose of the various groups of exercises must be kept in mind as well as the details of definitions, commands, and common faults.

2. Make a series of six lessons to follow in natural order after either of the series of lessons just given that the teacher may assign, using the progressive lists on pages 62 to 69 as material; make a second group of six lessons suited to some different grade or condition than those given; for example, for high school boys who have had no previous training and who work in the aisles of the school room.

3. Prepare to teach any of the lessons of your own planning to a group of fellow students.

4. As a final test, each student may be required to make one or more lesson plans in class, the preceding lesson and the grade being given by the teacher; the progressive lists should be used for reference; each student may be required to teach his lesson.

CHAPTER IX

GERMAN GYMNASTICS

GENERAL PRINCIPLES. The German system of gymnastics represents a national movement to popularize bodily exercises for educational and hygienic purposes and to make them universal. Unlike the Swedish system, the recreative effects of exercise are emphasized rather than the corrective effects; in the place of a few exercises selected with great care, the German system includes an almost endless number. The following principles are emphasized:

(1) Gymnastics should provide balanced development of the muscular system.

(2) To secure vigor of action and best effects, the exercises must be pleasing to the pupils.

(3) Each teacher should be prepared, by an extensive study of anatomy, physiology, and gymnastics, to make and execute his own lesson plans; no rigid form of lesson is advisable.

(4) The teacher must assume the pupils to be normal individuals; corrective and remedial gymnastics are in the province of the physician and the hospital, not of the teacher and the school.

CLASSES OF EXERCISES. The German system recognizes the following classes of exercises:

(1) Free exercises, meaning those taken in standing position without apparatus. These include some that closely resemble the Swedish exercises, and also a great variety of other ones. Tactics, figure marching, and fancy steps are included here.

(2) Exercises with light apparatus, such as dumb bells, wands, Indian clubs, hoops, etc.

(3) Exercises on heavy apparatus, sometimes called, "heavy gymnastics," including work on parallel bars, horizontal bar, vaulting bar and horse, trapeze, traveling rings, flying rings, ladders, ropes, poles, etc. Here the body must be lifted, at least in part, by the arms.

(4) Companion exercises, including athletic contests, games, and combats. The Germans as a race are especially fond of the third class of exercises mentioned, which require and develop great individual strength and skill. They use apparatus as a means of increasing interest in gymnastics, while the Swedes use it only to produce definite effects on the body.

THE GERMAN PLAN OF LESSON

While not believing in the use of a uniform plan of lesson as complex and unvarying as the Swedish, the teachers of German gymnastics are inclined to follow a plan that is about as follows, the lesson occupying about an hour.

(1) Marching. For boys this is of a military character, lasting about eight minutes, and ending with a run; for girls it is more often figure marching and fancy steps, lasting fifteen minutes.

(2) Exercises with light apparatus, boys twelve minutes, girls fifteen minutes.

(3) Exercises on heavy apparatus with at least one change of apparatus, and including some form of jumping; boys thirty minutes, girls twenty minutes.

(4) A game, lasting ten minutes.

The Germans make more distinction than the Swedes between exercises for boys and for girls; they agree with the Swedes in giving games only a subordinate place in a gymnastic lesson, instead of devoting whole periods to games as do the English and Americans.

The plan of lessons outlined above can be used in school gymnastics only in exceptional cases, where there is a fully equipped gymnasium and full hour periods for gymnastics. The present course will deal only with light apparatus and fancy steps, since these illustrate best the exercises useful in the schools and the methods of teaching and conducting them.

TEACHING GERMAN GYMNASTICS

The teaching of German gymnastics requires the use of commands, demonstration, observation, and criticism of class work, as we have practiced these things in Swedish gymnastics. The main difference is that the exercises of the German system are more numerous and their definitions and words of command are not so definitely fixed. This gives more freedom to the teacher, allowing a wider range of exercises and permitting him to invent new ones or to take old ones in new ways if he chooses to do so; at the same time it throws upon the teacher more responsibility and makes his work more complex, for he must select good exercises, conduct them with as perfect clearness and definiteness as is required in teaching Swedish gymnastics. It is just as important, too, in German gymnastics, that the work be done accurately by the pupils.

The following movements with light apparatus are given to illustrate common forms of German gymnastic exercises, and for practice in teaching. Students should prepare to teach these move-

ments. The first thing in such preparation is to read the definitions with the apparatus in hand, executing each movement as it is read, thus fixing a clear idea of how it is done. While the teacher may vary from the manner in which the movement is defined, if he has reason for so doing, he must never leave it indefinite, but must always teach a certain definite thing. On account of the great number of movements used, commands in German gymnastics are less simple and exact than in Swedish. It is often necessary to make the command as it is needed by using clear and simple English for the explanatory part, and if the executive part is not evident, the numbers, *One! Two! Three!* etc., are satisfactory as signals for action.

CHAPTER X.

DUMB BELLS

Dumb bells for the following exercises should be of wood, varying from one-fourth of a pound in weight for the smallest pupils to one pound for the strongest of high school boys. Racks may be obtained for hanging dumb bells on the wall, or they can be conveniently kept in a strong basket, in which they may be moved from place to place as needed.

ELEMENTARY MOVEMENTS WITH DUMB BELLS

Fundamental position is usually taken with the arms at the sides; if pupils are inclined to make too much noise with the bells they may be directed to take rest position with bells on the hips.



Fig. 41
Bells on hips



Fig. 42
Bells on shoulders

(1) POSITION OF BELLS.

(a) Command, *Bells on hips,—Place!*

The bells are lifted and the knuckles placed against the waist just at the crest of the hip bone, with thumbs to the front. Fig. 41.

Return command, *Bells,—Down!*

(b) Command, *Bells on shoulders,—Place!* Fig. 42.

Arms are raised sideward and bells placed horizontally on the shoulders with thumbs to the rear.

Return command, *Bells,—Down!*

(c) Command, *Bells on chest,—Place!*

Bells are raised by bending arms and placing them high up on chest in the form of the letter V, lower end of bells close together but not touching, elbows close to sides. Fig. 43.

Return command, *Bells,—Down!*

(2) SWINGS OF BELLS.

These are movements of bells with elbows extended.

(a) Command, *Bells sideward,—Swing!* Arms are raised sideward until they are horizontal, palms down.

Return command, *Bells downward,—Swing!*

Swings are also made in a similar manner forward and forward-upward from fundamental position, forward and upward from sideward, sideward and upward from forward, and sideward and forward from overhead. When the bells are swung forward or upward the palms are usually turned toward each other. The command *Swing* is used whenever the straight arm is swung from the shoulder, except in strokes. The swing to right horizontal is shown in Fig. 44.



Fig. 44
Bells to right, horizontal



Fig. 43
Bells on chest



Fig. 45
Strike bells in front of thighs

(3) STROKES.

Strike bells forward,—One! The bells are swung sideward and then forward in a curve and the thumb ends are struck strongly

together with the arms straight and horizontal forward. At the command, "*Two*" the bells are swung back to the starting point. Strokes are also made in a similar way overhead, in front of thighs, (fig. 45), behind hips, etc. A starting point should be chosen that will permit a good full swing of the bells.

Anvil strokes are strokes in which one bell is held still to represent an anvil while the other strikes it a swinging blow to imitate a hammer. *Anvil stroke on left shoulder,—Strike! or One!* The left bell is placed on the left shoulder as in fig. 42 and the right bell strikes a strong blow against the front end of it, as shown in fig. 46. At the command, "*Two*" the bells return. Anvil strokes are made at either hip or either shoulder, on either knee with a fallout, at full arms length, and in other places.



Fig. 46

Anvil stroke on left shoulder



Fig. 47

Sideward thrust

(4) THRUSTS.

These are extensions of the arms, starting from some position in which the arm is bent, usually from bells on chest or shoulders. *Right bell sideward,—Thrust!* The arm is extended sideward horizontal and as it extends the thumb is placed against the ball of the bell and the wrist is bent so as to bring the bell in line with the arm; the arm is rotated so as to turn the back of the hand to the front. (Fig. 47.) *Bell,—Replace!* The command may also be given. Command, *Thrust right bell sideward,—One! Two!*

Thrusts are made also forward, upward, and downward, either with hands singly, in alternation, or both at once. In the forward, upward, and downward thrusts the arm is rotated as above described in the sideward thrust, the backs of the hands being turned toward each other in the three cases.

The twist of the arm is used to prevent the jerk that occurs at the end of the thrust. Thrusts are sometimes given without it, the thrust terminating in the same position of the bells as the corresponding swing.

COMBINATIONS—THEORY

Since the elementary bell movements are exclusively movements of the arms, the distribution of the exercise to different parts of the body requires combination of these with movements of other parts. The movements most commonly combined with bell movements are as follows:

(a) The stride forward, (Fig. 24.); stride sideward, (Fig. 19.); and the stride outward, which is diagonally forward-sideward. In these positions the weight of the body is equally divided between the two feet.

(b) The step positions sideward, forward, outward, backward, and cross-wise either in front or behind the other foot. Here the weight of the body is all retained over the stationary foot, and the moving foot taps the floor strongly with the toe and rebounds.

(c) The walk position forward, sideward, and outward. Here the weight of the body is all transferred to the moving foot and the heel of the stationary foot is raised. (See fig. 75.)

(d) The fallout forward, sideward, and outward. (Figs. 4, 5, and 6.) Here the knee of the moving leg is bent to a right angle.

(e) The layout forward, sideward, and outward. This is like a fallout and gives the same position as the corresponding fallout but differs in the manner of taking it, the opposite foot being moved in the reverse direction; for example, the right forward layout is taken by moving the left foot backward and bending the right knee, the body inclining forward as in the forward fallout; the left sideward layout is taken by moving the right foot sideward and bending the left knee, body inclining to the left. The word "right" or "left" indicates the direction of the incline and not the direction of moving the foot.

(f) The reverse fallout. In this position the back knee is bent, the forward knee is straight, and the trunk erect. (Fig. 48.)



Fig. 48
Reverse fallout

(g) The lunge is like a fallout except that the trunk is held erect instead of being inclined in a line with the extended leg. (See fig. 68.)

(h) The common leg movements of Swedish gymnastics, including heel raising (Fig. 25), knee bending, (Fig. 26), leg raising, (Fig. 27), knee raising (Fig. 28), half kneeling (Fig. 29), and kneeling (Fig. 30).

(i) Trunk bending forward (Fig. 14), downward (Fig. 15), sideward (Fig. 16), backward (Fig. 13) and twisting (Fig. 17).

In making combinations of dumb bell movements and other movements, care should be taken to match them well together as to speed, form, and direction. For example, the quick strokes and thrusts go well with step positions and heel raising, while the bell positions and anvil strokes take more time and hence combine better with stride positions and fallouts, which are not so rapid as step positions. Again, the arm, leg, and body movements combined should be those that go together naturally and appropriately. For example, thrusting right bell forward and step position forward right go well together, while thrusting right bell forward and step position crosswise left do not; anvil stroke at shoulder or hip goes well with a stride position or a fallout but not with kneeling. The movements combined need not go in the same direction, but judgment and care must be used in their selection.

COMBINATIONS—PRACTICE

Make three combinations of bell positions with other appropriate movements; the same for strokes, anvil strokes, thrusts, and swings of bells. Be ready to demonstrate these combinations in class.

MOVEMENTS AND EXERCISES—THEORY

DEFINITIONS. A simple motion or any combination executed in one count is called a *movement*; a series of such movements taken in succession form an *exercise*; several exercises are grouped together to form a *lesson*; when a lesson is memorized by the class and performed without commands it is sometimes called a *drill*.

In writing an exercise we separate the different movements by dashes and number them by figures in parentheses; punctuation marks are used as needed. For example, (1) swing bells forward and step position forward right—(2) swing bells sideward and step position sideward right—(3) swing bells forward and step position forward right—(4) swing bells downward and replace foot. Another exercise somewhat abbreviated: (1) sw bells f H rse—(2) sw bells s K bd—(3) sw bells f K str—(4) sw bells d H sk. Every exercise

terminates in the starting position, which is usually the fundamental position, as in the case of the two just given, but another position may be chosen as the starting position if the teacher desires. For example, Std bells on chest, (1) bd Tr f-d and sw bells between knees—(2) Tr rse and bells on chest—(3) thrust bells up and look at bells—(4) bells on chest.

The simplest possible form of exercise is composed of two movements, the second being the reverse of the first, as (1) std s sw bells f—(2) sw bells d F replace. Such exercises are used with beginners and with pupils of the primary grades.

There are three possible types of four count exercises, as follows:

1. A four-count exercise made of two two-count exercises taken in succession; these two two-count exercises may be exactly alike, as in (1) sw bells s std s r—(2) position—(3) sw bells s std s r f—(4) position; the second two-count exercise may be like the first taken on the opposite side; or the two two-count exercises may be entirely different, as in (1) sw bells s std s l—(2) position—(3) strike bells f step position f—(4) position.

2. A four-count exercise may be made by taking two movements for the first two counts and the reverse of these for the third and fourth counts, as in (1) sw bells f H rse—(2) sw bells s K bd—(3) sw bells f K str—(4) sw bells d H sk.

3. A four-count exercise composed of three distinct movements and a return to position on count four, as in (1) sw bells f step position f r—(2) sw bells s step position s r—(3) sw bells u step position b r—(4) position.

In a few cases where the movements are easily remembered, eight movements are combined in an exercise, as in (1) bells on hips—(2) bells on shoulders—(3) bells on head—(4) bells u—(5) on head—(6) on shoulders—(7) on hips—(8) position.

In choosing movements to combine into exercises it is necessary to choose such as will go well together. The ease with which an exercise can be understood, executed or remembered, depends much on the appropriateness of the movements combined. Compare the following by trying to execute each in series: (1) sw bells f step pos f r—(2) sw bells s step pos s r—(3) sw bells f step pos f r—(4) sw bells d F repl. (1) sw bells f step pos s r—(2) bells on shoulders reverse fal l—(3) strike bells u step pos b l—(4) position.

Each of these exercises uses about the same parts of the body and none of the elementary parts are difficult, but the second combination is almost impossible from its absurdity and the confusion of mind that it produces.

MOVEMENTS AND EXERCISES—PRACTICE

Make two exercises of two dumb bell movements each.

Make one four-count exercise of each of the three types given above.

Write these exercises in abbreviated form with the appropriate punctuation and hand to the teacher for correction.

Be ready to teach any of these exercises. For method of teaching see Development of Complex Exercises, page 44.

LESSONS WITH DUMB BELLS—THEORY

Exercises with dumb bells and with other light apparatus should be arranged into lessons in accord with the following principles:

(1) The complexity of the movements and the muscular requirements should be suited to the age, sex, and degree of advancement of the pupils.

(2) The lesson should include a variety of arm, leg, and trunk movements, so as to provide balanced development of the body.

(3) No movement should be used to excess.

(4) The lesson should begin with the easier exercises and advance to a climax, then close with an easier one.

(5) If correction of posture is needed, special attention should be given to fundamental position, and special corrective exercises may be included, such as balancing, arch flexions, etc.

The following lessons will illustrate how dumb bell lessons are made.

EXERCISES AND LESSONS—PRACTICE

Prepare to teach the following lessons to the class.

For music, use march or two step time for the quicker movements, one or two counts for each movement; for the slower ones use waltz time, one measure for each movement.

A LESSON WITH DUMB BELLS, SUITABLE FOR A PRIMARY GRADE

Exercise 1. (1) Bells on hips and step pos f r—(2) reverse of 1, coming back to position. Taken four times with right foot, then four times with left foot.

Exercise 2. (1) Bells on shoulders and std s r—(2) reverse of 1, coming back to position. Taken four times with the right foot, then four times with the left foot.

Exercise 3. (1) Strike bells u and std f r—(2) reverse of 1, coming back to position. Taken four times with right foot then four times with left foot.

Exercise 4. (1) Std f r and sw bells s—(2) turn 90 degrees to

left on toes and strike bells f—(3) reverse last movement coming to position of 1—(4) reversal, coming back to position. Taken four times with right foot forward then four times with left foot forward.

A LESSON WITH DUMB BELLS, SUITABLE FOR GIRLS OF
4TH OR 5TH GRADE

Arranged by Fannie Cheever Burton

Exercise 1. (1) Raise bells forward with bells vertical by bending arms, elbows close to sides; then turn both bells to right by twisting forearms so as to strike upper end of l bell against lower end of r, (fig. 49)—(2) reverse the twist of forearms, striking upper end of r bell against lower end of l—(3 to 32) repeat these strokes in rhythm, letting arms fall to sides after the stroke on count 32.

Exercise 2. (1) Sw bells f std f r—(2) turn 90 degrees to l on balls of feet, letting heels sink at end of turn—(3) reverse 2, coming back to position of 1—(4) position. Taken alternately r and l for 32 counts.



Fig. 49



Fig. 50

Exercise 3. (1) Sw bells s step pos r—(2) place r bell on l hip, arm behind waist, and cross step pos backward r (Fig. 50)—(3) reverse of 2, coming back to position of 1—(4) position. Alternate r and l for 32 counts.

Exercise 4. (1) Bells on shoulders r K rse—(2) thrust bells f and str r K f, foot 6 inches from floor—(3) reverse 2, coming back to position of 1—(4) position. Alternate r and l for 32 counts.

Exercise 5. (1) Strike thumb ends of bells in front of thighs and tap floor strongly with toes of r foot in step pos f—(2) strike bells f and repeat the tap of foot—(3) strike bells u and repeat tap with foot—(4) position. Alternate r and l foot for 32 counts.

Exercise 6. (1) Place both bells on l shoulder and step pos s l—(2) thrust r bell u and l bell d and rse r leg s—(3 to 6) hold this position—(7) reverse 2, coming back to position of 1—(4) position. Alternate r and l for 32 counts.

A LESSON WITH DUMB BELLS, SUITABLE FOR 8TH GRADE BOYS

Exercise 1. (1) Std f r and sw bells s—(2) rse H and strike bells u—(3) reverse 2, coming back to position of 1—(4) position. Taken 4 times r, 4 times l, 4 times alternately r and l, 48 counts in all.

Exercise 2. (1) Sw bells s step pos f r—(2) fal f r strike bells f, bells in front of knee—(3) reverse 2, coming back to position of 1—(4) position. Take four times r, four times l, four times alternate.

Exercise 3. (1) Bells on shoulders and step position s r—(2) thrust r bell u, l bell d, and fal s r—(3) reverse 2, coming back to position of 1—(4) position. Take four times r, four times l, and four times alternate.

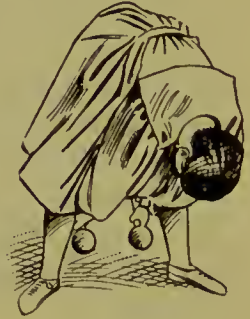


Fig. 51
Chopping

Exercise 4. (1) Spring up lightly and alight with a std s with bells on chest—(2) Tr bd f—d freely and sw bells f—d—b between knees, (Fig. 51)—(3) reverse 2, coming back to position of 1—(4) reverse 1, alighting in fundamental position. Take four times.

Exercise 5. (1) Bd K, bd Tr f, place bells on floor in front of toes, transferring a part of the body weight to the arms—(2) lift feet and extend legs and body backward, weight resting on bells and toes, (Fig. 40)—(3 to 6) hold this position—(7) reverse 2, coming back to position of 1—(4) position. Take four times.

Exercise 6. (1) Std f r strike bells f—(2) turn 180 degrees to left on balls of both feet and strike bells behind hips—(3) same as 1—(4) position. Take 4 times r, four times l, four times alternate.

A LESSON WITH DUMB BELLS, SUITABLE FOR HIGH SCHOOL GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. Use exercise 1 in the lesson for girls of the 4th and 5th grades, beginning the strokes slowly and softly and gradually increase the speed and force to the 32nd count; stamp r foot on 32nd count.

Exercise 2. (1) Sw bells s and step pos s r—(2) strike bells u and fal s r—(3) reverse 2, coming back to position of 1—(4) position. Take alternately right and left to 32 counts.

Exercise 3. (1) Sw r bell f—(2) sw l bell f—(3 and 4) strike both ends of the bells together three times in the two counts—(5) sw r bell d—(6) sw l bell d—(7 and 8) stamp r, l, and r, the three stamps in the two counts. Alternate right and left to 32 counts.

Exercise 5. (1) Sw r bell s—u and rse l leg s—(2, 3, 4) hold this pos—(5) bd r K—(10, 11, 12) hold this position—(13) return to position—(14, 15, 16) rest. Repeat on the other side.

Exercise 6. (1) Step pos crosswise b l and bells on r shoulder—(2) lift 1 foot, turn 90 degrees to r, and step b l to reverse fallout, thrusting bells f—(3) reverse 2, coming back to pos of 1—(4) position. Alternate r and l to 32 counts.

Exercise 7. (1) Sw bells to r horizontal (see Fig. 44), and step pos s r—(2) sw bells to l horizontal and sway to fal s r—(3) reverse 2, coming back to pos of 1—(4) position. Alternate r and l to 32 counts.

Exercise 8. (1) Fal f r with r bell vertical on r knee—(2) sw l bell in a full arm circle backward upward and then forward downward, striking lower end of it on upper end of r bell—(3) reverse 2—(4) reverse 1.

Make an original lesson with dumb bells, suitable for a second or a third grade. The lesson should include four exercises, each of two counts, planned to distribute the muscular work well over the body. Prepare to teach it, and hand it in for correction.

Make an original lesson suitable for seventh grade girls, with six exercises, each having four counts. Prepare to teach and write in abbreviated form, ready to hand in to the teacher.

CHAPTER XI

WANDS

THE WANDS. Wands are usually of wood, from 24 to 30 inches in length and from 1-2 inch to an inch in diameter; high school boys can use steel wands of the same size. The ends should be rounded. The wooden sticks can be purchased from dealers in gymnasium supplies or from furniture manufacturers, who use them for chair rounds, etc. Wands can be most conveniently kept in a strong box from 8 to 12 inches square and 20 inches high, with a heavy and broad base.



Fig. 52
Fundamental position



Fig. 53
Wand forward and step position
forward

ELEMENTARY WAND MOVEMENTS

Fundamental position is usually taken with the wand held in both hands and resting against the front of the thighs, backs of the hands to the front, (Fig. 52). For marching the wand is usually carried in the manner described in military regulations for carrying arms. A few movements with wands require it to be held with palms forward.

(1) SWINGS OF WAND.

- (a) *Wand forward,—Swing.* Fig. 53. Arms straight and horizontal. *Wand downward,—Swing!*

(b) *Wand forward upward,—Swing!* Fig. 54. Arms straight and vertical. *Wand downward,—Swing!*

(c) *Wand to right horizontal,—Swing!* Fig. 55. Arms at same height. *Downward,—Swing!* Same to left.

(d) *Wand to right vertical,—Swing!* Right arm straight up, left arm exactly as in (c) Fig. 56. Same to left.

(e) *Aim forward right,—Aim!* Fig. 57. Wand along right arm, left arm as in (c) and (d). Same to left.

Swings are also taken to various diagonal positions.



Fig. 54
Wand upward

(2) POSITIONS OF WAND INVOLVING MOVEMENTS OTHER THAN SWINGS.

(a) *Wand on Chest,—Place!* Fig. 58. *Wand,—Down!*

(b) While wand is on chest we may command, *Wand forward,—Thrust!* or *Wand upward,—Thrust!* or *Wand downward,—Thrust!*



Fig. 55
Wand right horizontal, left leg raise sidewise



Fig. 56
Wand to right vertical

(c) While wand is overhead we may command, *Wand on shoulders,—Place!* Fig. 59. Then we may command, *Wand upward,—Thrust!*

(d) While wand is forward we may command, *Cross right arm over left,—One! Two!* Fig. 60. Elbows are bent to a right angle. The movement may be reversed.



Fig. 57
Aim forward left and kneeling on left knee



Fig. 58
On chest

MOVEMENTS, EXERCISES AND LESSONS WITH WANDS

Wand movements, like those with dumb bells, are exclusively for the arms, calling for combination with movements of other parts of the body in order to properly distribute the work. The leg and trunk movements used for combination in the case of dumb bells serve in the same way here. The making of exercises and lessons with wands follows the same principles that govern similar work with



Fig. 59
Wand on shoulder and tr bd sideward



Fig. 60
Crossing arms and fallout sideward

bells. The following lessons illustrate how such lessons are made, and serve as practice in teaching. Prepare to teach the exercises of these lessons to the class.

A LESSON WITH WANDS, SUITABLE FOR SIXTH GRADE BOYS

Exercise 1. (1) Sw wand f and std s r—(2) sw wand u and sway to fal s r—(3) reverse 2, coming back to position of 1—(4) position. Take four times right and four times left.

Exercise 2. (1) Sw wand f std s r—(2) bd Tr f sw wand f—d between knees with r end of wand to rear and l end to front—(3) reverse 2, coming back to position of 1—(4) position. Four times to r and four times to l.

Exercise 3. (1) Sw wand f std s r—(2) turn to r 90 degrees on balls of both feet, sway to fal f r and sw wand to shoulders—(3) reverse 2, coming back to 1—(4) position. Four times r, four times l.

Exercise 4. (1) Sw wand f—u and std f r—(2) kneel on l knee and aim f r—(3) reverse 2, coming back to 1—(4) position.

Exercise 5. (1) Sw wand f—u and std f r—(2) sw wand to right horizontal and sway to r fal f—(3) reverse 2, coming back to 1—(4) position.

Exercise 6. (1) Sw wand f—u and std f r—(2) lift r foot, sw wand to r vertical, and fal s r—(3) std b r, sw wand f—d, let wand slip through l hand and strike floor between feet with l end of wand—(4) position.

A LESSON WITH WANDS, SUITABLE FOR SEVENTH GRADE GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. (1) Sw wand forward step pos f r—(2) place l foot beside r, slide wand through l hand until hands are together and strike floor with l end of wand, wand vertical in front—(3) reverse 2, coming back to position of 1—(4) position. Four times r, same l.

Exercise 2. (1) Sw wand f std f r—(2) turn 90 degrees to left on toes and cross r arm over l—(3) reverse 2, coming back to position of 1—(4) position. Four times r, and four times l.

Exercise 3. (1) Sw wand r horizontal and std s r—(2) sw wand r vertical and bd Tr l—(3) reverse 2, coming back to 1—(4) position.

Exercise 4. (1) Sw wand f step pos f r—(2) wand on chest and rse r K—(3) reverse 2, coming back to 1—(4) position.

Exercise 5. (1) Sw f step pos f r—(2) sw wand d to r and rear, r hand behind hip and l hand before r shoulder, step pos crosswise b r look over l shoulder—(3) reverse 2, coming back to pos 1—(4) position.

Exercise 6. (1) Sw wand f—u and std s r—(2) bd Tr f—d and lay wand on floor, wand pointing from front to rear, r end to rear—

(3) reverse 2, coming back to 1 but leaving wand on floor—(4) place hands on wand as if to take it—(5) repeat—(6) stoop and grasp wand—(7) come to position of 1—(8) position.

A LESSON WITH WANDS, SUITABLE FOR EIGHTH GRADE BOYS

Exercise 1. (1) Wand on chest and step pos f r—(2) thrust wand forward and fal f r—(3) reverse 2 with a spring from foot, coming back to pos of 1—(4) position. Take four times right and four times left.

Exercise 2. (1) Swing wand f and std s r—(2) turn 90 degrees to r on balls of feet, sway to fal f r, and sw wand to r horizontal—(3) reverse 2, coming back to pos of 1—(4) position. Take four times to r and four times to l.

Exercise 3. (1) Sw wand f—u and std b r—(2) aim f r and std f r—(3) reverse 2, coming back to pos of 1—(4) position. Take four times r and four times l.

Exercise 4. (1) Cross l arm over r and fal s r—(2) cross r arm over l, sway to fal s l, bd Tr s l and strike r end of wand on floor to l of l toe—(3) reverse 2, coming back to pos of 1—(4) position. Take four times r and then four times l.

Exercise 5. (1) Wand on shoulders and rse r K—(2, 3, 4) hold this pos—(5) thrust wand u and stretch r K s—(6, 7, 8) hold this pos—(9) reverse 5, coming back to pos of 1—(10, 11, 12) hold this pos—(13) return to pos—(14, 15, 16) rest. Repeat on the other side.

Exercise 6. (1) Sw wand f, std b r, and incline by bending r K—(2) std f r, turning to l 90 degrees and sway to fal s r, swinging wand to l horizontal—(3) reverse 2, coming back to pos of 1—(4) position. Take four times to r and four times to l.

A LESSON WITH WANDS, SUITABLE FOR HIGH SCHOOL GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. (1) Sw wand r horizontal step pos s r—(2) replace r foot and sw wand u—(3) sw wand l horizontal and step pos l—(4) position. Alternate r and l to 32 counts.

Exercise 2. (1) Sw wand f step pos f r bd l K—(2) wand on chest, extend l knee and rse r K—(3) thrust wand f str r K f, foot six inches above floor—(4) position. Alternate r and l to 32 counts.

Exercise 3. (1) sw wand r hor step pos s r—(2) sw wand r vertical, sway weight over to r foot, bd Tr l—(3) reverse 2, coming back to 1—(4) position. Alternate r and l to 32 counts.

Exercise 4. (1) Sw wand r hor fal s r—(2) sway to fal s l and sw wand s—d beside r thigh, l hand as before—(3) return to 1—(4) position. Alternate r and l to 32 counts.

Exercise 5. (1) Sw wand f step pos crosswise l—(2) lift r foot, fal s r, swing wand diagonally u r, half way between hor and vert—(3) sw wand f cross l foot over r in step pos as in 2—(4) position. Alternate r and l to 32 counts.

Exercise 6. (1) Spring lightly f, alighting with K bd (See Fig. 26) and sw wand f—(2) sw wand r hor and extend r leg sideward to step pos, keeping left knee bent—(3) sw wand to l to a diagonal pos, l arm s hor, r arm curved overhead, straighten l K, r foot crosswise step pos b—(4) position. Alternate r and l to 32 counts.

Exercise 7. (1) Curve r arm overhead, l hand in front of l hip, and std f r—(2) fal f l, lowering wand, r hand at l hip and l end of wand pointing toward floor in front of left foot—(3) reverse 2, coming back to pos of 1—(4) position. Alternate, etc.

Exercise 8. (1) Sw wand f fal s r—(2) turn 90 degrees to r, kneel on l K, aim f l—(3) reverse 2—(4) position. Alternate r and l to 32 counts.

PRACTICE

Make an original wand lesson suitable for fifth grade girls.

This lesson should contain four exercises, each of four counts but not too complex, and the work well distributed over the body. Make an original wand lesson of six exercises suitable for high school boys or girls.

Prepare to teach and write in form to hand in.

CHAPTER XII

HOOPS

The hoops used in these exercises are of wood, three feet in diameter and one inch in width. They can be obtained of the gymnasium supply companies, or barrel hoops wound with bunting can be used, although not so satisfactory. Hoop exercises are suitable for pupils of the second, third, or fourth grades, or girls of higher grades. The exercises are usually taken with accompaniment of waltz time, one measure for each movement. "The Shepherd Boy," by Wilson is a favorite piece of music for hoop drills.

ELEMENTARY MOVEMENTS WITH HOOPS

The fundamental position is taken with the hoop resting on the floor in front of the toes and the hands resting on the top of the hoop, close together. Fig. 62.



Fig. 62
Fundamental position



Fig. 63
Divide

1. MOVEMENTS OF HOOP HELD IN BOTH HANDS.

- (a) *Divide the hoop*.—*One!* Slide the hoop in l hand, holding firmly with the r hand, until hands are opposite. Fig. 63. *Two!* Hoop returns.
- (b) *The frame*.—*One!* From divide, raise the hoop by bending arms until the face is in the center of it. Fig. 64. At command *Two* return.

- (c) *Hoop horizontal overhead,—One!* Taken from divide or frame; arms fully extended, hoop level. Fig. 65.
- (d) *Thrust downward horizontal,—One!* Fig. 66.
- (e) *Hoop on right shoulder,—Place!* Fig. 67. Both (d) and (e) are taken from overhead.
- (f) *Archer to right,—Aim!* Taken from divide or frame. The position is meant to imitate shooting with bow and arrow. Fig. 68. Notice position of head.

2. A FEW MOVEMENTS OF HOOP HELD IN ONE HAND.

- (a) *Swing hoop sideward downward to right,—One!* Fig. 69.
- (b) *Swing to r horizontal,—Two!* Fig. 70.
- (c) *Swing sideward upward,—Three!* Fig. 71.
- (d) *Hoop on head,—Four!* Fig. 72.



Fig. 64
Frame



Fig. 65
Horizontal overhead

COMBINATIONS, EXERCISES, AND LESSONS

Hoop movements may be combined with movements of legs or trunk in much the same way as bell and wand movements, but certain combinations are of course more appropriate in each case. The following are for illustration and for practice in teaching.

A LESSON WITH HOOPS, SUITABLE FOR PUPILS OF FOURTH GRADE

Exercise 1. (1) Divide hoop and rise heels—(2) hor overhead and bd K—(3) return to position of 1—(4) position. Repeat to 32 counts.

Exercise 2. (1) Std s r and frame—(2) bd Tr f (Fig. 73)—(3) Tr rse—(4) position. Alternate sides to 32 counts.

Exercise 3. (1) Divide—(2) archer r and lunge s r (Fig. 68)—(3) return to divide—(4) return to position. Alternate sides to 32 counts.



Fig. 66



Fig. 67

Exercise 4. (1) Hoop hor overhead—(2) fal s r and hoop on r shoulder (Fig. 67)—(3) return to pos of 1—(4) position. 32 counts.

A LESSON WITH HOOPS, SUITABLE FOR SIXTH GRADE GIRLS

Arranged by Fannie Cheever Burton

Exercise 1. (1) Divide—(2) frame—(3) hor overhead—(4) thrust downward—(5) return to 3—(6) same as 2—(7) same as 1—(8) position. Repeat, making 16 counts.



Fig. 68
Archer and lunge



Fig. 69

Exercise 2. (1) Frame—(2) thrust f—(3) r fc—(4, 5, 6) repeat the facing three times—(7) frame—(8) position. Repeat.

Exercise 3. (1) Raise arms f, hoop hanging vertically in front of arms—(2) bd Tr s r—(3) return—(4) position. Repeat.

Exercise 4. Sw hoop diagonally s—u r and rse l leg s in line with arm (Fig. 71)—(2 to 7) hold this position—(8) position. Repeat on other side.



Fig. 70

Fig. 71
Sideward upward

Exercise 5. (1) Divide hoop and raise it f, turning lower edge toward chest until hoop is hor beneath arms and std f r—(2) turn body 90 degrees to l on toes and turn hoop 180 degrees, so that it lies on top of arms—(3) reverse 2, coming back to position of 1—(4) position. Repeat on alternate sides to 16 counts.



Fig. 72



Fig. 73

Exercise 6. (1) Rse r K through hoop, letting hoop hang from knee, and place hands on neck (Fig. 19)—(2) and (3) hold this position—(4) position. Repeat on alternate sides to 16 counts.

Exercise 7. (1) Archer r and step pos s r—(2) archer l and step pos crosswise to l with r foot—(3) reverse 2, coming back to 1—(4) position. Repeat on alternate sides to 16 counts.

Exercise 8. (1) Kneel on r knee (Fig. 74)—(2) frame—(3) hor overhead—(4) frame—(5) repeat 3—(6) frame—(7) like 1—(8) position. Repeat on other side.

A LESSON WITH HOOPS, SUITABLE FOR GIRLS OF HIGH SCHOOL GRADE

Arranged by Fannie Cheever Burton

Exercise 1. (1) Hoop diagonally s d r with l hand on hip—(2) hoop hor s r—(3) hoop up to vertical and grasp with l hand also—(4) hoop on head, Fig. 72—(5) reverse 4—(6) hoop hor s l with r hand on hip—(7) hoop diagonally s d l—(8) position. Repeat on other side.



Fig. 74

Exercise 2. (1) Sw hoop diagonally s-u r with l hand on hip and fal s r—(2) sw hoop diagonally s d r—(3) return to 1—(4) position. Repeat on alternate sides to 16 counts.

Exercise 3. (1) Archer r and step pos s l—(2) sway on toes to step pos s l and bd Tr s l, archer pointing vertically upward—(3) return to pos of 1—(4) position. Repeat on alternate sides to 16 counts.

Exercise 4. (1) Divide and rse arms f, turning hoop hor beneath arms, and step pos f r—(2) rse arms u and sw hoop to frame pos b of head with fal f r—(3) return to pos of 1—(4) pos. Repeat on alt. sides to 16 counts.

Exercise 5. (1) Sw hoop diagonally s u r and step pos s l—(2) bd r arm, bringing hoop close to shoulder, and fal s l—(3) return to pos of 1—(4) pos. Repeat on alt. sides to 16 counts.

Exercise 6. (1) Archer diagonally s u r and fal s r—(2) archer diagonally s d r and sway to fal s l—(3) return to pos of 1—(4) pos. Repeat on alt. sides to 16 counts.

Exercise 7. (1) Kneel on r K—(2) frame—(3) archer to r—(4) frame—(5) archer to l—(6) frame—(7) hoop in pos on floor—(8) pos. Repeat on other side.

Exercise 8. (1) Kneel on r K—(2) frame—(3) archer to r—(4) frame—(5) hoop on floor and hands resting on top with forehead resting on hands—(6, 7) hold this pos—(8) pos. Repeat on other side.

PRACTICE

Make an original hoop lesson of six exercises suitable for seventh grade girls and prepare to teach it to the class.

CHAPTER XIII

FANCY STEPS

Arranged by Fannie Cheever Burton

The few fancy steps given here are selected from many others that can be used. All of the elementary movements and some of the combinations are suitable for pupils of the lower grades. All of them should be practiced with musical accompaniment, using two-step time unless otherwise stated. Fancy steps can be taught conveniently with the class in single or double line around the outside of the room, so that the movements may be continuous without stopping and turning, and all in plain sight of the teacher.

ELEMENTARY MOVEMENTS

(a) (1) Step pos f l (Fig. 53)—(2) walk pos f l (Fig. 75)—(3 and 4) repeat 1 and 2 with r foot. Continue in series.

(b) Same as (a), using step pos outward.

(c) “ “ “ , “ “ “ sideward.

(d) “ “ “ , “ “ “ backward.

(e) “ “ “ , “ “ “ crosswise.

(f) “ “ “ , “ “ “ “ backward.

(g) Repeat exercises (a) to (f) with this change: swing the leg in each case as if to take a step position, but do not touch the floor with the foot.

(h) Same as (a), except that in place of a step position the foot is lifted and swung in front of the other knee, the knee of the moving foot being flexed to a right angle and the knee turned outward. Fig. 76.

COMBINATIONS OF FANCY STEPS

(a) Step pos sidewise and crosswise. This may be taken in mazurka time in the following manner:

(1) Step pos s l—(2) step pos crosswise l—(3) walk pos f l—(4, 5, 6) repeat with other foot; it may be taken with two-step time in the following manner:

(1) Step pos s l—(2) step pos crosswise l—(3) repeat l—(4) walk pos f l—(5 to 8) repeat with other foot.

(b) Step position forward and backward. This may be taken in either of the two ways given for (a).

(c) The change step.

(1) Walk pos f l and immediately bring r foot up close behind l, arch of r foot touching l heel—(2) step pos f l—(3) repeat 1 with r foot ahead—(4) repeat 2 with r foot.

In dancing this movement is taken with a slide of the foot along the floor; in military marching the feet are lifted. The former method can be used on a smooth floor, but the latter must be used where the floor or the shoes are rough.



Fig. 75
Walk position



Fig. 76
Knee flexion

(d) Step position sideward, crosswise, and change step. The step positions occupy counts one and two, the change step is taken on three and four; repeat on the other side.

(e) Step position forward and backward and change step.

(f) Knee flexion, step position forward, and change step.

(g) Repeat (e), (f), and (g), using three running steps in place of the change steps. This adds more life and vigor to the movement and makes it more pleasing to children.

(h) The "Rye" step.

(1) Step pos outward—(2) step pos crosswise—(3) step pos outward—(4) step pos b—(5) the first count of the change step, as described in (c)—(6, 7) repetitions of 5—(8) rest—(9 to 16) repeat on other side.

(i) The half rocking step.

(1) Step pos crosswise l, throwing all the weight on the l foot and raising r foot backward—(2) spring on r foot and rse l foot f—continue springing on the l and r foot alternately, keeping the feet in the same relative positions. Practice also with r foot forward.

(j) The rocking step.

(1) Like count 1 of the preceding—(2) hop on l and sw r foot f—(3) sw r foot across l, throw weight upon it, and sw l foot b—(4) hop on r foot and sw r foot f. Continue in series.

(k) Mazurka step. (Mazurka time required.)

(1) Slide r foot two foot lengths to r with heel raised—(2) spring lightly from both feet and alight on l where r foot finished the slide, with r foot raised s—(3) hop on l and knee flexion with r—(4, 5, 6) repeat in same direction.

(l) The pirouette.

(1) Place r foot one foot length to r, turning it to r and rear—(2) lift l foot, cross it in front of r, close to it and past it to rear, at the same time turning on the balls of the feet in the same direction until a complete revolution has been made. The arch of the l foot will be behind the heel of the r when the turn is complete.

THE KLAPPDANS

A SWEDISH FOLK DANCE, SUITABLE FOR PUPILS OF

FOURTH GRADE

Pupils in double line around the room, turned so as to march clockwise; boys occupy the inside line, girls the outside; the hand and foot toward the partner will be called *inside*, and the other *outside*; partners join hands and place outside hands on hip. Music, a good schottische.

Exercise 1. The Frolic. (1, 2, 3) Take three running steps, starting with outside foot—(4) hop on outside foot, raising inside foot forward—(5 to 8) repeat, starting with inside foot—(9 to 16) repeat the entire movement, finishing facing each other with hands on hips.

Exercise 2. The Salutation. (1 and 2) Boys make a stiff bow to partner, bending in hips only, while girls make a stiff curtsy, crossing r toe behind l and bending knees, trunk erect—(3 and 4) clap hands three times in front of chest in the time of two counts—(5 and 6) repeat 1 and 2, girls making the bow and boys the curtsy—(7 and 8) repeat 3 and 4—(9) clap r hand against partner's—(10) hands on hips—(11) clap l hand against partner's—(12) hands on hips—(13 and 14) whirl completely around to l on l foot, clapping r hand against partner's as the whirl begins—(15 and 16) stamp r, l, and r, in the time of two counts.

Exercise 3. Repeat exercise 1.

Exercise 4. Repeat exercise 2, changing counts 3 and 4 as follows: (3 and 4) rest l elbow in r palm and make three threatening gestures toward partner by shaking the r hand with forefinger uplifted and head inclined toward hand; change counts 7 and 8 in same way, using the opposite hands.

THE MAZURKA

A GYMNASTIC DANCE, SUITABLE FOR SEVENTH GRADE GIRLS

Pupils in double line around the room, marching clockwise, inside hands grasped. Mazurka time.

Exercise 1. The Balance Step. (1) Step forward with outside foot and transfer all the weight upon it, at the same time turning toward partner—(2) rise inside foot high from floor, bending knee, and immediately place it forward, transfer half the weight upon it and rise heels—(3) sink heels—(4, 5, and 6) repeat 1, 2, and 3 moving contra-clockwise, dropping hands and grasping other hands—(7) the same as 1, in clockwise direction—(8) cross rear foot over in front of forward foot and transfer weight upon it—(9) like 1 again—(10) like 8—(11) like 1 again—(12) like 2.

Repeat the entire exercise, beginning counter-clockwise.

Exercise 2. (1 to 9) Grasp inside hands and take three mazurka steps starting clockwise around the room with outside foot leading—(10 to 12) drop hands and pirouette, starting with outside foot—(13 to 21) repeat (1 to 9) in the opposite direction—(21 to 24) stamp three times with alternate feet, starting with inside foot.

THE IRISH LILT

A GYMNASTIC DANCE, SUITABLE FOR HIGH SCHOOL GIRLS

Pupils standing in regular class formation. Music, "The Irish Washer Woman."

Exercise 1. Hop l and rse r leg f—(2) hop l and sw r leg s—(3) spring to r foot and rse l leg b—(4) hop r and hold l leg in same position—(5 to 12) repeat the preceding r and then l—(13) spring upward and alight in stride pos s—(14) spring again and alight with feet together—(15) hop l and knee flexion r—(16) hop r and rse l leg f.

Movements 13 to 16 make what is called the "Break," and this is the finish for each exercise of the lilt.

Exercise 2. (1) Hop l and tap r toe f—(2) hop l and strike r heel in place of toe—(3) hop l and tap r toe behind l heel—(4) hop l and rse r leg f—(5 to 12) repeat three times—(13 to 16) "break."

Exercise 3. (1) Hop l and rse r leg s—(2) hop l and sw r leg f—(3) hop l and quickly flex and extend r knee—(4) repeat 3—(5 to 12) repeat and then l—(13 to 16) "break."

Exercise 4. (1) Hop l and tap r toe s, toeing in—(2) hop l and strike r heel in place of toe—(3) hop l and tap r toe behind l heel—(4) hop l and rse r leg s—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 5. (1) Hop l and tap r toe f—(2) hop l and rse r leg f—(3) spring on r, crossing it over in front of l and rse l leg b—(4) hop l and rse r leg f—(5 to 12) repeat r and then l—(13 to 16) "break."

Exercise 6. (1) Hop l and strike r heel f—(2) change to same pos with l heel f—(3 to 14) change r and l alternately as in the preceding—(15 and 16) stamp l, r, and l in the time of two counts.

CHAPTER XIV

INDIAN CLUBS

THE SELECTION OF CLUBS

Experience has shown that the best weight for Indian clubs for general class use is much lighter than was formerly chosen. This is partly because a class of people who are less vigorous is now using them extensively, and partly because the interest in them now centers in the variety and speed of the movements rather than in the strength required to swing them. For practicing new exercises, which is the main thing in class work, the clubs for the strongest high school pupils should not exceed one and one-half pounds; most men prefer one pound clubs for new exercises and one and one-half for familiar exercises. For classes of women and children clubs of one-fourth, one-half, and three-fourths of a pound should be provided. The clubs should not be too short. One chief fault with many patterns of lighter clubs is so short a handle that the natural time of the swing is too quick to be controlled well.

THE TEACHING OF CLUB SWINGING

The teaching of Indian club exercises differs from the teaching of bell, wand, and hoop exercises because most of the club exercises are individually more difficult to co-ordinate and at the same time less vigorous; more teaching and more practice is necessary for the mastery of each movement, making it necessary to utilize the time more fully and carefully; less time is needed for rest. It is also to be noticed that the movements are continuous, instead of being in distinct parts, as bell and wand exercises are; this makes the faults more difficult to observe, requiring complete familiarity with the exercises and as much experience in observation and criticism of club swinging as possible.

After the first few trials to get the general form of the movements, all club swinging should be done in series with accompaniment of waltz time, one measure for each movement. The movements should be taught, if possible, in the order in which they come in the series; as soon as the series is fairly well done, a new movement should be added, and the whole series practiced with the addition;

faults should be pointed out at the close of each repetition of the series, with the demonstration of the fault and the correct form in contrast if advisable, and then the series should be practiced again; too much time should not be used for showing individuals, as practice is all important, a large percent of the faults being due to lack of practice and not to wrong ideas. Until the pupils know the order of the movements, the teacher should direct the practice by naming the next in order while the count just preceding the last is being executed; for example, if eight counts of each movement are to be taken, the name of the next should be spoken on the seventh count, so that pupils may have an instant to think of the change.

A few children learn club exercises readily at the age of five or six, but for class exercises they are not usually satisfactory below the sixth grade.

ELEMENTARY CLUB MOVEMENTS

While resting, pupils hold the clubs easily at sides; the clubs should be brought to position and fundamental position of the body assumed at the same time.

Command, *With clubs in position,—Stand! or Clubs,—Up!* Fig. 77.

The ball of the club is grasped in the hand, the clubs are held in a vertical position with the tops of the clubs about as high as the top of the head, hands in front of the shoulders, elbows close to sides.

Faults: Clubs not at proper height or not vertical, body not well poised. See figure 1.

(a) PLAIN SWING SIDEWISE.

Command, *Right sidewise,—Swing!* Fig. 78.

Raise the club upward and begin to move it sideward, elbow becoming fully extended as arm is diagonally sideward upward at an angle of 45 degrees as shown in figure 78. Then, without pausing, swing sidewise, downward, and across at full arm's length and back to starting point, as is indicated in the figure. The swing occupies one count; the club remains in the position during the second count; then the exercise is repeated in even rhythm. Care must be taken to swing exactly in the lateral plane. Repeat with the left club.

Faults: Swing made in a diagonal direction; arm not fully extended during swing, especially on starting and just before coming to position.

(b) PLAIN SWING CROSSWISE.

Command, *Right crosswise,—Swing!*

The preceding exercise is reversed, using right and left club singly.

(c) PARALLEL PLAIN SWINGS.

Command, *Plain swings parallel to right,—Swing!*

The clubs start from position to the right at the same time, the right club executing the sidewise swing and the left club the cross swing.

Faults: One club swings slightly before the other; body bent to the side.



Fig. 77
Position of clubs



Fig. 78
Plain swing

(d) OPPOSITE SWINGS.

Command, *Both sidewise (or crosswise),—Swing!*

Both start at once on the sidewise swing, clubs crossing in front of knees. Reverse the movement for the crosswise swing.

Faults: Body bent forward with each swing; not poised forward far enough; swings not in lateral plane.

A SERIES OF PLAIN SWINGS

Plain swings, eight counts of each, beginning parallel right,—Swing! The series is as follows:

- I. Parallel right.
- II. Both sidewise.
- III. Both crosswise.
- IV. Parallel left.

This series should be practiced, always in the same order, until it is perfectly familiar, as it is the basis for the order of movements in later series.

COMBINATIONS

Club movements are not so readily combined with all kinds of other movements as are those with bells, wands and hoops, but a few

combinations are good and serve to distribute the exercise. The plain swings can be combined with step positions, stride positions, side steps, fallout, and some others. The following will illustrate the use of combinations with the series just given:

I. Parallel right with step position sideward right. Take the step position with the plain swing and return the foot while the club rests on the second count. Continue for the eight counts.

II. Both sidewise and side step. Take the stride position sideward with the plain swing and bring in the other foot on the second count. Take the step first to right and then to left, alternately for the eight counts.

III. Both crosswise and heel raising. Stand on tiptoes during the swing and in fundamental position on the second count. Continue through the eight counts.

IV. Parallel left and step position sideward left. Practice this series till perfectly familiar.

THE CIRCLES BEHIND THE SHOULDERS

These circles are not so easily made alone, but are readily added to the plain swings. They are taken up singly as follows:

(a) SIDEWISE.

Command, *Plain swing with shoulder circle, right sidewise,—*
Swing! Fig. 79.

Execute the first count of the plain sidewise swing, then, instead of coming to rest on the second count, carry the hand backward and, without pausing or stopping the momentum of the club, make a small circle behind the shoulder, as shown in figure 79. In making the small circle the hand is at the height of the eye and directly above the tip of the shoulder; the club is held between the thumb and first finger, with the ball of the club in the hand.

Faults: Hand held too low while making small circle; club grasped too tightly; plain swing too small, especially at later part.

Practice same exercises with the left hand.

(b) CROSSWISE.

Command, *Plain swing with shoulder circle, right crosswise,—*
Swing!

Preceding exercise is exactly reversed. Swing the plain swing crosswise on the first count and then, instead of coming to rest, make a small circle crosswise and down behind the head and shoulder, without pausing or checking the momentum of the club.

Faults: The hand held too high while making small circles; plain swing too small; club grasped too tightly.

Practice same exercise with the left hand.

(c) PARALLEL TO RIGHT.

Command, *Parallel to right with shoulder eircles,—Swing!*

The right swings sidewise, the left club crosswise; shoulder circles parallel as in Fig. 80 on the second count.

Faults: Shoulder circles not made at same height; sidewise circle is apt to be too low and the other too high.

(d) FOLLOW.

This is a variation from the parallel, differing from it only in having the club that swings crosswise start and keep a half circle in advance of the other. *Follow to right,—Swing!*



Fig. 79
Shoulder circle



Fig. 80
Parallel

Faults: Club that leads is not far enough in advance; not keeping with the music.

(e) BOTH SIDEWISE.

Command, *Both sidewise with shoulder eircles,—Swing!*

Faults: Shoulder circles made with hands too low; plain swings made without fully extending the arms.

(f) ALTERNATE SIDEWISE.

This is a variation of both sidewise, differing from it only in having one club make the plain swing while the other makes the shoulder circle, and vice versa. *Alternate sidewise with shoulder circles,—Swing!* The right club begins with the plain swing, the left with the shoulder circle; the following diagrams show the difference in rhythm between the follow and the alternate swings:

		Count one	Count two
Follow right:	{ Right hand	plain swing	shoulder circle
	{ Left hand	plain swing	shoulder circle
Alternate:	{ Right hand	plain swing	shoulder circle
	{ Left hand	shoulder circle	plain swing

After a little practice with:

(g) BOTH CROSSWISE with shoulder circles we are ready for:

(h) ALTERNATE CROSSWISE. Here the rule for starting is the same as for alternate sidewise, and as shown in the above chart.

The parallel to left and the follow to left are too nearly like these movements to right to need description. When they are learned we can swing the following series:

SERIES OF SWINGS WITH SHOULDER CIRCLES

1. Parallel to right.
2. Follow to right.
3. Both sidewise.
4. Alternate sidewise.
5. Alternate crosswise.
6. Both crosswise.
7. Follow to left.
8. Parallel to left.

Each of these movements should be taken for 8 or 16 counts and then a change should be made to the next without any interruption of the rhythm. For method of directing the class, see pages 104-5. The change from 1 to 2 has no difficulty. To change from 2 to 3 the left hand must reverse after the shoulder circle of the last count. From 3 to 4 the right hand makes no change, but the left hand makes a second shoulder circle at the beginning of the new movement. To change from 4 to 5, stop the clubs at the end of the last movement of 4, raise them a little above the head, then drop them crosswise on the new movement.

Pupils should notice the relation of this series to the series of plain swings on page 106: 1 corresponds to I, and a variation of it is added as 2; 3 corresponds to II, and a variation of it is added as 4; 6 is like III, and a variation of it is inserted as 5; 8 is like IV, with the corresponding variation as 7. The last four are arranged in the reverse order of the first four. This arrangement makes easy changes from one movement to the next.

COMBINATIONS

When the above series is mastered, the following combinations may be given:

1. Parallel to right and step position s r with bending of l knee. The step pos is taken with the plain swings and the return with the shoulder circles, 16 counts.

2. Follow to right and fal s r, taken as follows: std s r and plain swings on count 1,—sway to fal s r and shoulder circles on count 2,—sway back to std and plain swings on count 3—replace the foot and shoulder circles on count 4. 16 counts.

3. Both sidewise and side step to right for the first two counts, repeat the club movement and step in opposite direction on the next two counts. Continue for 16 counts.

4. Alternate sidewise for 8 counts without other movement, followed by 8 counts of the following: (1) let the clubs drop backward until they rest on the shoulders by loosening the grasp, hands as in position of clubs, and rse r knee (fig. 28.)—(2) hold this position—(3) extend knee forward, foot 6 inches from floor—(4) hold this position—(5) return to position of 1—(6) hold this position—(7) return to standing position—(8) rest.

5. Alternate crosswise, without combination, for 8 counts, followed by 8 counts as in the preceding but taken on other foot.

6. Both crosswise and side step as in 3, taking the step to left instead of to right.

7. Follow to left and fal s l, taken as in 2.

8. Parallel to left and step pos s l, taken as in 1.

ADVANCED CLUB MOVEMENTS



Fig. 81
Mill wheel

(a) THE MILL WHEEL.

Command, *Mill wheel to right,—Swing!*

To learn this movement easily a preliminary exercise is necessary; this consists of the parts of the mill wheel made by the hand separately.

Preliminary exercise: Hold the left forearm and club horizontal forward, elbow resting against side and elbow bent to a right angle. Starting with the right club in position, as in fig. 77, make three circles in the forward plane as follows: first, a circle forward with the right wrist lying across the left arm as in fig. 81, the palm being down at first and up at the end; second, make a circle just like the first excepting that right wrist crosses under the left arm instead of above it; third, leaving the palm up, as when it finishes the second circle, make a circle on the right side of the right arm in the forward plane, hand nearly still. Now begin at the first and repeat in series, practicing the three in order without stopping.

Faults: The circles not made in the forward plane; under circles not complete at their upper half.

Practice same with left hand.

The mill wheel is a "follow" combination of these exercises, arranged as shown in the following diagram; the three circles just described are called the over, under, and side circles respectively.

		Count one		Count two	
Mill Wheel	Right hand:	over	under	side	over
	Left hand:	under	side	over	under

The mill wheel to right begins, as the diagram indicates, with the under circle with the left hand. As the left club reaches its lowest point in this circle, the right club starts over. The over circles come at the beginning of each count of the music, and so serve as the guide for rhythm. The circles made by each hand come in the order in which they were taken singly.

The mill wheel to left differs from the mill wheel to right only in the stage of the movement at which we begin it; the exercise to right begins with left hand under, and that to left with right hand under. The reason for this is that the mill wheel is regularly taken after a follow, and the hand that is leading in the follow must lead in the mill wheel.

When the mill wheel is mastered, repeat the series of swings with shoulder circles and insert the mill wheel after the follow. The smoothest change is made by repeating the follow again after the mill wheel.

(b) **THE COFFEE GRIND** is a follow movement somewhat similar to the mill wheel, but the circles are horizontal. The movement is learned first with the hands singly, swinging the club horizontally above and below the hand in alternation; both clubs swing in the same direction in follow time to make the coffee grind.

(c) **THE CIRCLE IN FRONT OF SHOULDER.** This circle is made at the same height as the shoulder circle with the club passing in front of arm and shoulder. A new way of holding the club is required here; the ball of the club must be held between the ends of the thumb and two or three fingers, instead of in the notch between thumb and first finger as usual. This circle is made with the plain swing, in the same manner as the shoulder circle. A series can be swung using the front shoulder circle instead of the one used hitherto, with parallels, follows, opposites, and alternates.

(d) **THE REEL.** This is made by taking the shoulder circle and the circle in front of shoulder in alternation, without any plain

swing. The reel may be made sidewise or crosswise, in the same direction as the corresponding plain swings.

Reels can be made parallel, opposite, or alternate; the alternate is the most pleasing of these, and is often introduced into the series of swings with shoulder circles after the alternate sidewise and before the alternate crosswise. The alternate reel may be thought of as a variation of the regular alternate, substituting the small circle in front of shoulder in place of the plain swing.

(e) THE LOWER CIRCLES. Each exercise thus far has been complete in two counts; the lower circles are usually added to the swings with shoulder circles, making four counts in all.

Right club sidewise with lower circles,—Swing! The order of the circles is as follows:

(1) The downward half of the plain swing—(2) lower back circle—(3) lower front circle—(4) upward half of plain swing and shoulder circle. The greatest difficulty here is the lower back circle, Fig. 82.



Fig. 82
Lower back circle

The lower back circle is made with the club held between the tips of fingers and thumb, as for the circle in front of shoulder. As the club swings downward it is carried to the rear and behind the back, with the palm of the hand to the rear. Swinging the hand in nearly to the middle of the back, the hand is raised three or four inches by a bend of the elbow to give the club its turn upward, and then brought quickly around the waist line to the front and the lower front circle made. The lower front circle is made with the hand nearly stationary in front of the thigh, with the palm to the front and inward, the club being held between thumb and first finger as in shoulder circles. The lower front circle being completed, swing the club far to the left to make the upward half of the plain swing, and complete the exercise with the shoulder circle.

Faults: Lower circle not far enough behind the back; plain swing too small; swings not in lateral plane.

Repeat with left hand.

Right club crosswise with lower circles,—Swing!

This is the exact reverse of the preceding. The order of the different movements is:

(1) The downward half of the crosswise plain swing—(2) lower front circle in reverse direction—(3) lower back circle in the reverse direction—(4) upward half of plain swing and the crosswise shoulder circle.

The only point of difficulty here is, as before, with the lower back circle. With the aid of the momentum gained in the making of the lower front circle, the club rises as it passes to the rear, so that when the hand is behind the hip the club points nearly upward. The palm must be turned to the rear. The club passes inward behind the back and then downward; the second half of the plain swing must be in the side plane, and the shoulder circle at the proper height.

The exercises with lower back circles require somewhat faster music than these previously learned.

SERIES OF SWINGS WITH LOWER CIRCLES

1. Parallel to left.

2. Follow to left.

2b. Mill wheel or Coffee grind.

2. Follow to left.

3. Both sidewise.

4. Alternate sidewise.

4b. Lower reel, sidewise.
5. Lower reel, crosswise.

5b. Alternate crosswise.

6. Both crosswise.

7. Follow to right.

7b. Mill wheel or Coffee grind.

7. Follow to right.

8. Parallel to right.

This series is given starting toward the left so that it can be taken immediately after the series with shoulder circles, which was given starting toward the right. The following are the difficult points:

The follow is not made easily with the lower circles and in exact rhythm; the following hand is apt to catch up, so that the last count of the exercise is a parallel. Care must be taken to make all circles full size with the hand that follows, as a shortening of these circles, especially the plain swing, is the cause of one hand's gaining on the other.

The mill wheel in this series is taken with a fallout outward, the hands touching the knee and the clubs swinging each side of the leg.

The alternate swings have the circles related to one another as follows:

	1	2	3	4
Alternate Sidewise —				
Right hand:	down	back	front	up and shoulder
Left hand:	up	shoulder	back	front
Alternate Crosswise—				
Right hand:	down	front	back	up and shoulder
Left hand:	back	shoulder	down	front

This relation of the swings is brought about if we start the left hand in each case on count three and the right hand on count one of the regular opposite swing.

The lower reels consist of lower back and lower front circles in alternation; the lower reel alternate sidewise starts with the right hand back and the left hand front; the crosswise movement starts in the opposite position, so as to start smoothly by stopping the former and reversing.

CHAPTER XV

COURSES IN SCHOOL GYMNASTICS

The course of gymnastic work that should be arranged for a certain group of children depends on several factors. Age is an important factor in determining what exercises are suitable, the length of the period, and the manner of conducting the class. The question of how much posture training should be given is to be answered in accordance with the amount of defect of posture present among the children, their ability to co-ordinate accurately, and the amount of such training they have had. The extent and form of the place for practicing must be taken into consideration in choosing the form of gymnastic exercise, and the equipment that is at hand often limits the practice to certain kinds of work. The following general principles may be stated as a guide to the teacher in planning the course to fit the conditions.

POSTURE

Posture work is seldom needed among the youngest children, usually not until the fourth or fifth grades. Exceptional cases of bad posture may be helped by a few minutes of attention outside of the gymnastic lesson and often outside of school hours. Such pupils should be helped in a kindly manner to take the erect standing position, and actual help with the hands will be needed in most cases. Test frequently to find how well the position can be taken, and develop a pride in the ability to take correct position at will. When once acquired, see that the pupil does well in this respect in all gymnastic work and at other times, gradually cultivating the habit of the erect posture.

When the grade needs posture work, Swedish exercises should be taught in the regular gymnastic period until the few easiest and best movements are learned. Swedish gymnastic work so easily drops to the level of drudgery that great care must be taken not to try to teach too much nor to follow it too long. A very few weeks is sufficient to teach all the posture exercises needed in a certain grade; when the pupils can take them well, let them know that they have satisfied the requirements and pass to more interesting exercises. During the rest of the year these posture exercises should be taken from day to day at the beginning of the gymnastic period, or what

is better, in the brief intervals between other classes, with great care to inspire pupils with an interest in practicing to improve their habitual poise and not to produce a spirit of antagonism. In no place is the willing coöperation of the pupil more necessary than in the correction of posture.

Pupils who have had Swedish gymnastics before should be taught a few more of the movements following next in progression, in order to maintain interest. The usual tendency on the part of those who teach Swedish gymnastics is to overdo it, with the result that pupils dislike it and come to take no interest in posture. In maintaining interest, however, it is not at all necessary to do poor or inaccurate work,—pupils like to do good work, and when they have done it they like to have their efforts appreciated.

Bad postures are apt to be most common in the seventh and eighth grades. This is the place, then, for doing the most effective teaching of posture, and the place where intelligent interest in good posture is most important. Defects of posture will never be as easily corrected as here if the pupils' coöperation can be secured.

DUMB BELLS

Dumb bell exercises may be used to advantage anywhere above third grade and in some third grades. The complexity of the exercises must be adapted to the age and ability of the pupils, and the weight of bells carefully chosen in view of bodily strength. Vigorous dumb bell work is especially enjoyed by boys from the seventh to the twelfth grades, but they do not sustain continuous interest for as long a time as some other kinds of work.

WANDS

Wands may be of so many lengths, sizes, and weights, and permit such an endless variety of movements that they are satisfactory under more widely varying conditions than any other form of apparatus. Light sticks like chair rounds are best for the smallest, while high school boys can use steel wands weighing two or three pounds. By choosing suitable exercises wands may be used by any grade of boys or girls.

FANCY STEPS are especially suitable for younger pupils, and the more rapid and difficult steps are highly beneficial for upper grade boys, although only a few of the boys are as skilful in them or enjoy them as well as the girls do.

CLUBS are used in the higher grades and HOOPS in the lower grades.

EXHIBITIONS

These are useful to arouse interest in physical training among citizens, most of whom never had any such work in their own school days and think it of little importance. It is an interesting fact that many a tax payer who has always objected to gymnastics as a "fad" becomes an enthusiastic advocate of the work after seeing his own children take part in a successful public exhibition of it. The main fault with exhibitions arises from their being so often entirely foreign to the regular work of the pupils. The best kind of an exhibition is one that is planned at the beginning of the term or year, all the work of the period leading up to it and the exhibition showing the best results of all that has been done, in posture, skill, and general physical ability. Such a plan of exhibitions makes them also a stimulus to interest and to good work through the term.

Teachers sometimes plan to give different kinds of gymnastic exercise on alternate days, but whatever is gained in interest because of the variety and novelty is more than lost in the delay in advancement. The best plan is to decide upon a certain series of lessons or the mastery of a certain drill, and then to stop and pass to something new and advanced when this is well done, as all teachers do in other subjects.

LENGTH OF THE TIME FOR GYMNASTICS

For primary pupils the gymnastic period should be short and frequent,—from ten to fifteen minutes two or three times a day being given to physical exercise. For primary pupils most of these periods, preferably two a day, should be devoted to games and plays, and one to gymnastics proper. With pupils of grammar grade the time should be fifteen or twenty minutes, once a day being sufficient for regular gymnastic work; several short periods of two or three minutes should be given to active exercises at times scattered through the day if possible. For high school pupils, from half an hour to an hour a day should be given to bodily exercise, preferably divided between games and some form of gymnastics. This is important because this is the time when the pupils stop to a large extent the free out of door exercises they have practiced before and become weak and lose vitality unless more time is given to bodily exercise in school.

As an example of a plan for a year's gymnastic practice for a fourth grade, Swedish exercises may be given for 5 weeks, fancy steps for 15 weeks, a hoop drill for ten weeks, then fancy steps or figure marches for the rest of the time.

COURSES IN GYMNASTICS—PRACTICE

Outline a course of gymnastic practice for a class of eighth grade girls who have had gymnastic training for several years; a course for a class of sixth grade boys who have had no training; for a class of high school boys who have had a little training.

Practice in teaching full courses in gymnastics can not well be provided for in a course like this, but in most Normal Schools there is abundant opportunity for students who have done well in a course of this kind to be given such continuous practice. It is not every teacher who can present and conduct a lesson well who will succeed in maintaining interest and a high grade of work in a class for weeks at a time. Practice through a whole course of ten or twenty weeks tests the teacher's care in the formation of habits in details such as the speaking of commands and the observation and criticism of the work, his care and skill in preparing the lessons, and his general spirit and ability to maintain good standards of work. Both the gymnasium and the training school afford opportunity for such practice, and all students preparing to teach physical training as a specialty should be tested in this way and given an opportunity to show what they can do.

USEFUL BOOKS ON GYMNASTICS

ON SWEDISH GYMNASTICS

- Enebuske: Progressive Gymnastic Days' Orders. Silver, Burdett & Co.
- Posse: The Swedish System of Educational Gymnastics.
Kinesiology of Swedish Gymnastics.
Hand Book of School Gymnastics. Lee and Shepard.
- Nissen: A, B, C of Swedish Gymnastics. Educational Publishing Co.
- Trask: School Gymnastics. Christopher Sower Co.

ON FANCY STEPS AND RHYTHM WORK.

- A. P. F. D: Danish Folk Dances.
- Crawford: Folk Dances. A. S. Barnes & Co.
- Chalif School, N. Y. City: Music and Descriptions of Dances.
- Gilbert School of Dancing, Boston: Music and Gymnastic Dances.
- Hofer: Music for the Child World. Clayton F. Summy Co., Chicago.
- Newton: Graded Games and Rhythmic Exercises. A. S. Barnes & Co.
- Perrin: Rhythmic Balance Exercises.

ON INDIAN CLUBS

- Cobbett & Jenkin: Indian Club Exercises. Macmillan & Co.
- Schatz: Club Swinging. F. A. Bassette Co., Springfield, Mass.

GENERAL GYMNASTICS

- Bancroft: School Gymnastics with Light Apparatus. Heath & Co.
- Stecher: German American Gymnastics. Lee and Shepard.

The F. A. Bassette Co., of Springfield, Mass., will send a list of publications on gymnastics and furnish all such books at the regular price.



Playground Technique and Playcraft

A TEXT BOOK IN

Playground Architecture, Construction, Equipment, Organization and Supervision

For Playground Committees, Supervisors, Instructors, Park Boards, Manual Training Teachers, and others interested in Playgrounds, with The Playcraft Course in Constructive Play and the Home Construction of Playground Apparatus and Other Technical Details of Successful Playground Creation.

Edited by ARTHUR LELAND

Formerly Supervisor of Playgrounds, Louisville, Ky., St. Paul, Minn., Denver, Colo., Physical Director Y. M. C. A., Owensboro, Ky., Director Athletics and Gymnastics, University of Denver.

And LORNA H. LELAND

Formerly Executive Secretary Minnesota State Art Society, Assistant Supervisor Playgrounds, St. Paul, Minn.

With the assistance of an Advisory Committee

Technical plans and working drawings with descriptions relative to the main details of playground construction with a manual training course in the home manufacture of playground equipment are a most valuable feature.

This book is not the work of a theorist or a mere on-looker. It embodies twelve years' practical experience. It tells how to economize money and energy in playground construction. It gives the best thought of more than a dozen contributors who are leaders in the playground movement. Price, \$2.50. Postage 20 cents.

Playground Technique and Playcraft will be ready on or before September 1st. Advance subscriptions received now. Send the following slip at your earliest convenience, and insure prompt delivery of the book. Please write your name, address and the date of the order clearly. Earliest orders will naturally receive earliest attention.

Publication Dept.

The F. A. Bassette Co.,
Springfield, Mass.

..... 1909

Enclosed you will please find for \$2.70, for which send me one copy
(\$.....) copies
of Playground Technique and Playcraft.

Name

Address

